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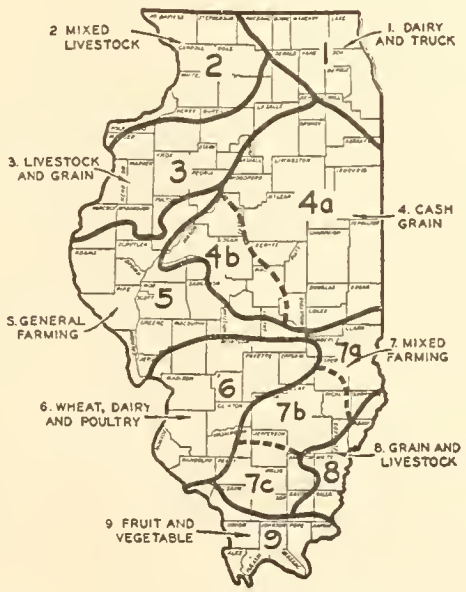
Summary of Annual Farm Business Reports on One Thousand Five Hundred Forty-Eight Farms

For the Year 1934



The Nine Major Type-of-Farming Areas in Illinois

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SUMMARY OF FARM BUSINESS REPORTS ON ONE THOUSAND FIVE HUNDRED FORTY-EIGHT FARMS IN ILLINOIS FOR 1934

P. E. Johnston and J. B. Andrews

Net cash farm incomes[1/] were higher in Illinois in 1934 than in 1933. This was the second year of improvement, since the low of 1932, for all type-of-farming areas of the state except the Chicago dairy area. The cash farm incomes increased to the 1930 level for six of nine of these areas (Figure 1).

Farm earnings increased most in the grain-surplus area of east central Illinois and least in the Chicago dairy area. Area VIII, the Wabash valley area, had the greatest percentage increase in income for the year as the result of very favorable crop yields, while yields were low for most other sections of the corn belt.

The above comparisons are based upon cash incomes less cash expenses and unpaid family labor, which leave out of consideration changes in inventory. Inventory increases were found in all reports, except those for Will, Adams, Pike, Brown, Morgan, Scott, Greene and Jersey counties. These counties represent areas where crop yields were extremely low due to drouth and chinch bug damage. The largest inventory loss was $307 per farm in Pike and Brown counties. The largest inventory increases were found in DeWitt, Piatt, Logan, Edgar, Douglas, Clark, Coles, Shelby and Moultrie counties and on the higher valued land in the southern Illinois report. The largest increase was $1,686 per farm for the farms in Shelby and Moultrie counties (Table A).

The increase in net cash farm incomes of the last two years, followed three years of declining incomes from the level which was obtained for the period 1925 to 1929. Several years of better earnings will be necessary to compensate for the excessive losses sustained during the three years of 1930, 1931, and 1932.

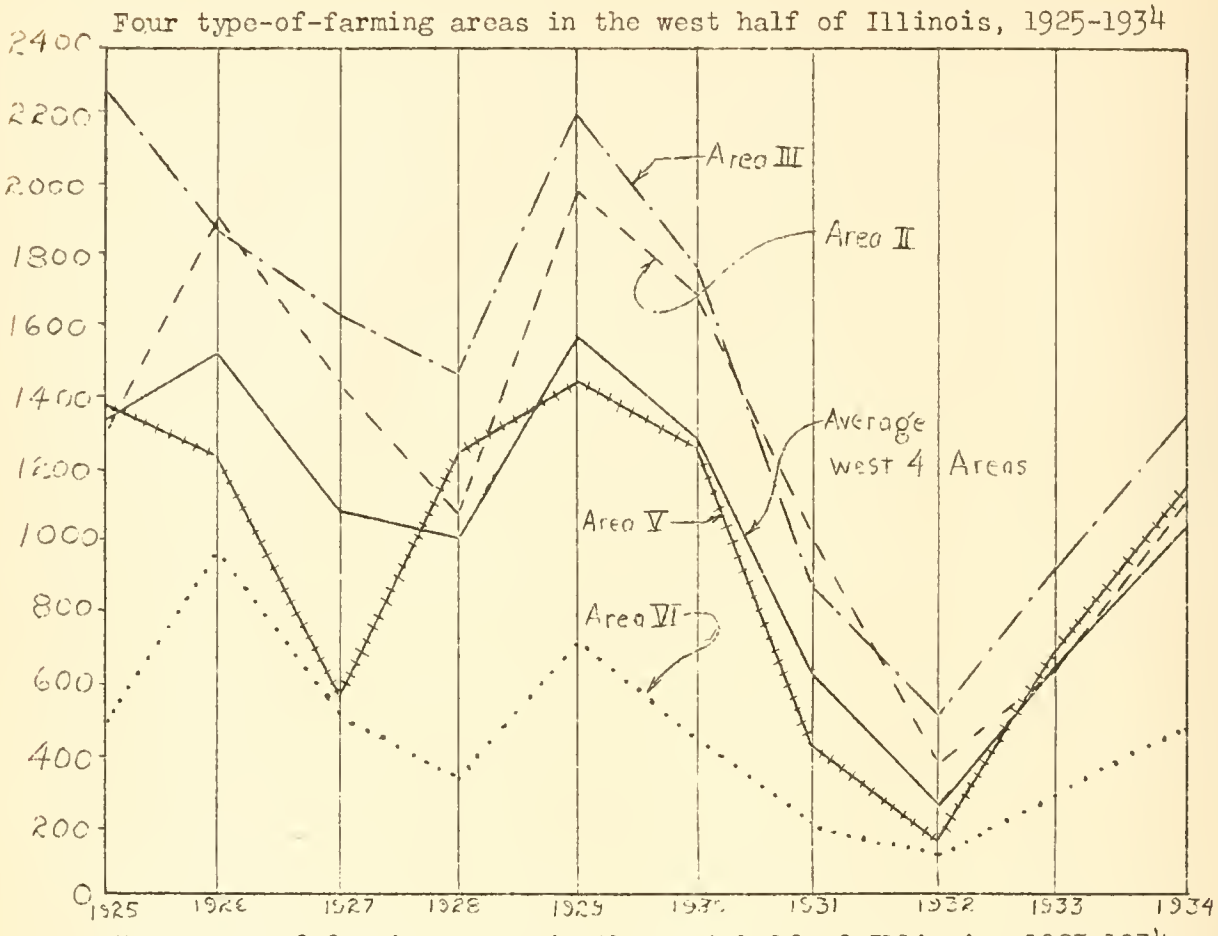
In reading the following tables it should be kept in mind that these data represent only those farms whose operators are progressive and business-like enough to keep accounts and submit them for analysis. Repeated studies have shown that the average farm operator enrolled in this accounting service earns a higher rate of interest on his invested capital than that of the average of the rank and file of all farmers. The difference previous to 1931 has averaged about 2 percent on the entire investment. With these facts in mind, the reader is cautioned against using these data to represent the average Illinois farm.

Farm earnings in 1934 varied widely from farm to farm, and from one section of the state to another. This wide variation in earnings was due to: (1) great differences in crop yields as the result of drouth and chinch bug damage; (2) to the wide deviation from normal in the prices of feeds and grain as compared with the prices of livestock and livestock products (see page 9).

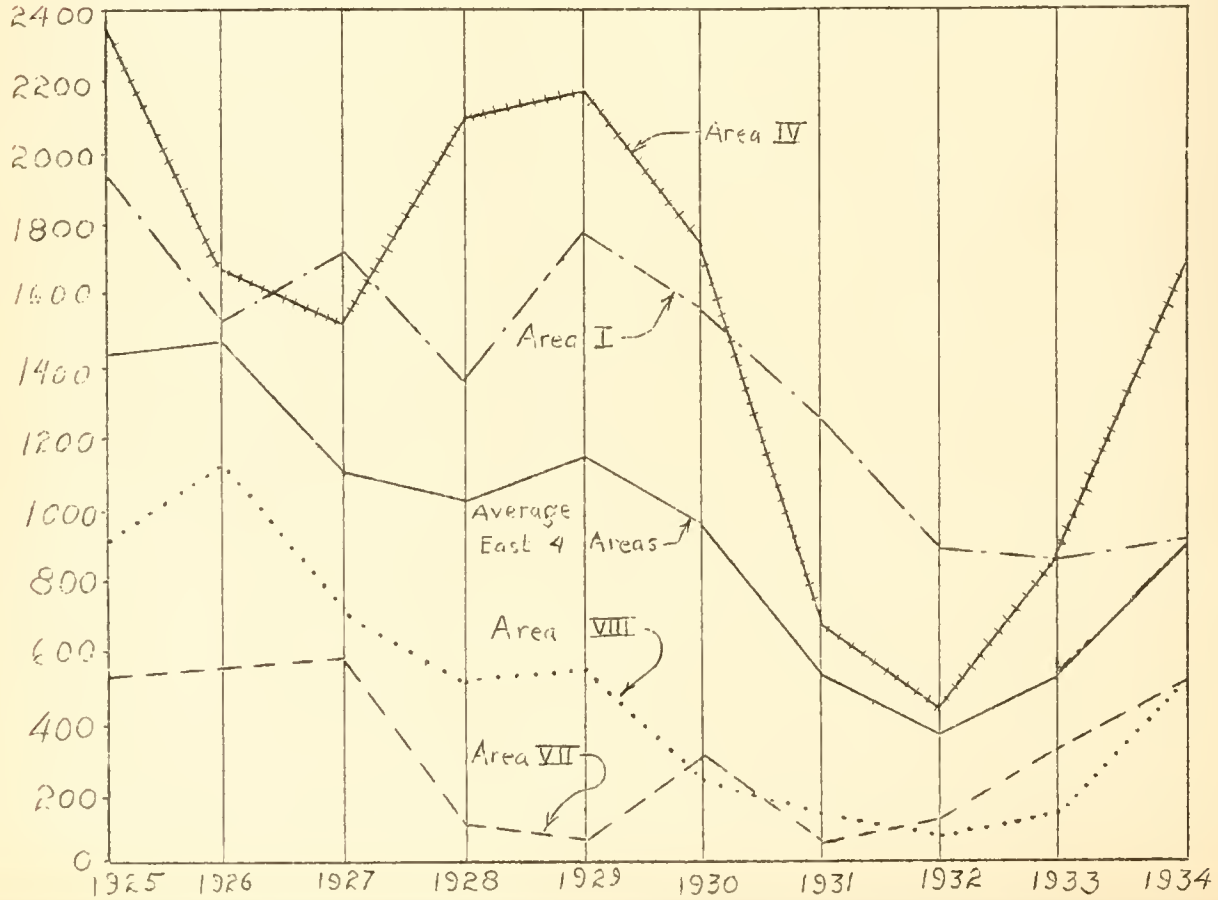
1/ Calculated by deducting cash expenses and value of operator and family labor from total cash incomes.

FIG. 1.--AVERAGE NET CASH INCOME PER FARM FOR THE FARM-ACCOUNT KEEPERS

Four type-of-farming areas in the west half of Illinois, 1925-1934



Four type-of-farming areas in the east half of Illinois, 1925-1934



Deviation in 1934 Crop Yields from the 10-Year Average

Since farm earnings were so intimately connected with crop yields in 1934 and since the deviation from normal was so extreme maps are included in this report which show, for each county, the 1934 yields for corn, oats, winter wheat, soybeans and tame hay as a percentage of the county 10-year average (1924-1933)1/. (See pages 4 to 8)

Corn yields. Corn yields were extremely low in west central Illinois where there were nine counties that had less than one-fourth of a normal yield. Brown and Adams counties had only 10 percent of a normal yield of corn. Corn yields were also quite low in the section of the state comprised of Kendall, Grundy, and Will counties (Figure 2).

The best corn yields were found in the southeastern part of the state where there were 10 counties having yields higher than normal. The extreme northwestern part of the state was favored with yields ranging from 76 to 96 percent of normal.

Oat Yields. There were 18 counties in western and north central Illinois which had, in 1934, oats that made less than one fourth of a normal yield (Figure 3). The most favored section of the state with respect to oat yields was the southern part, although but few counties had over four fifths of a normal yield.

Winter Wheat Yields. Winter wheat yields were above normal in about one-third of the counties in 1934, all of which were located in the southern half of the state (Figure 4). Less than one fourth of a normal yield was harvested in Livingston, LaSalle, Will, Kane, and DuPage counties, where dry weather and chinch bugs did much damage.

Soybean Yields. Soybean yields in 1934 were above average for over half of the counties in the state and were particularly high in those counties that grow the most beans (Figure 5). Soybeans were a high income crop in 1934 since the larger production sold at a good price. Even in the primary drouth area the soybeans produced much better than the corn and oats.

Tame Hay Yields. Hay yields were below average in four fifths of the counties of the state. The better than normal yields were all in the central and southern areas. In central Illinois, the high hay production was due largely to the large percentage of total acreage which was soybean hay. The drouth area of western Illinois had about a 60 percent hay crop (Figure 6).

1/ Analysis made from data collected by Illinois Cooperative Crop Reporting Service.

Fig. 2.--1934 Corn Yields (Expressed as a percentage of the 10-year average for each county)

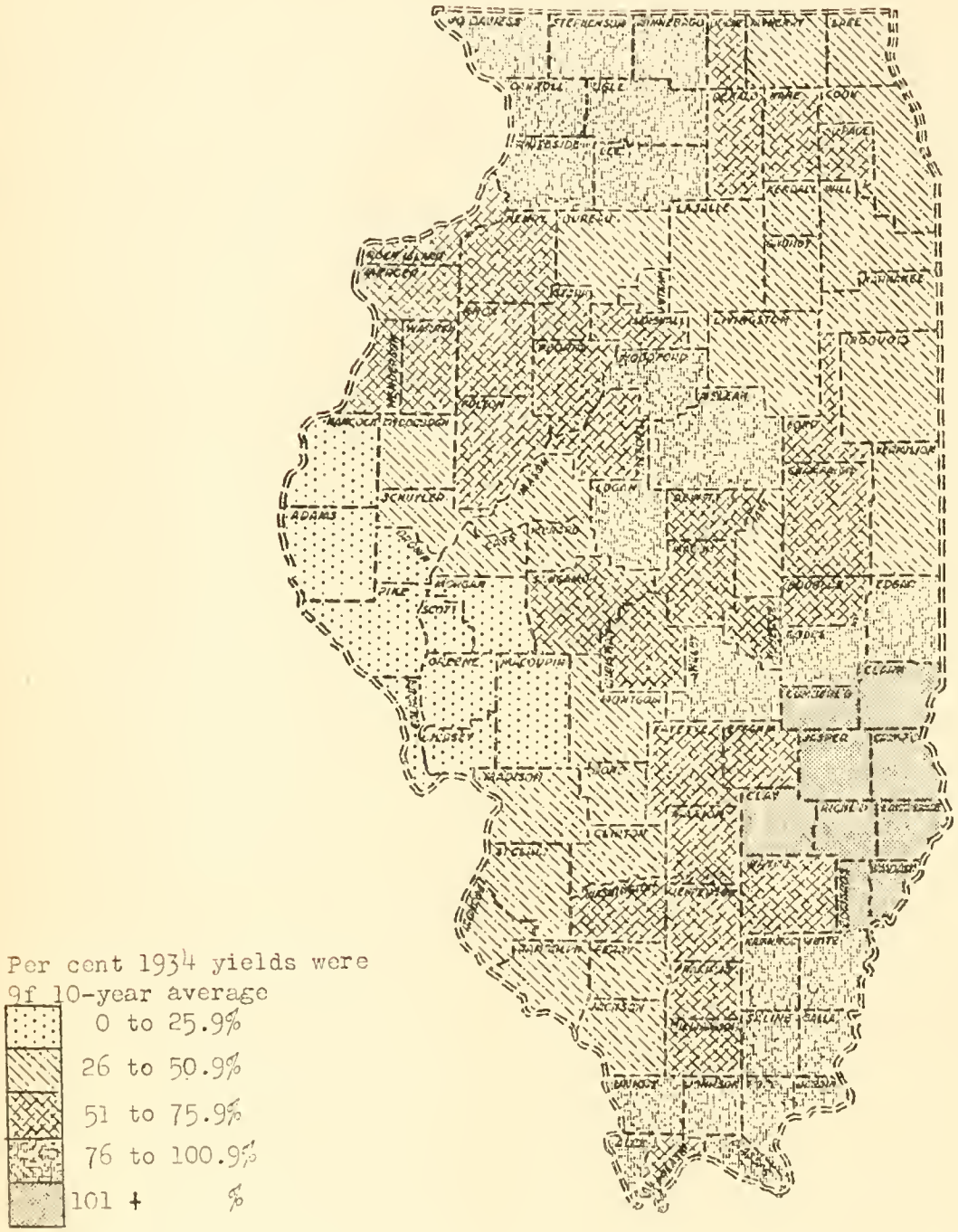


Fig. 3.--1934 Oats Yields (Expressed as a percentage of the 10-year average yield for each county)

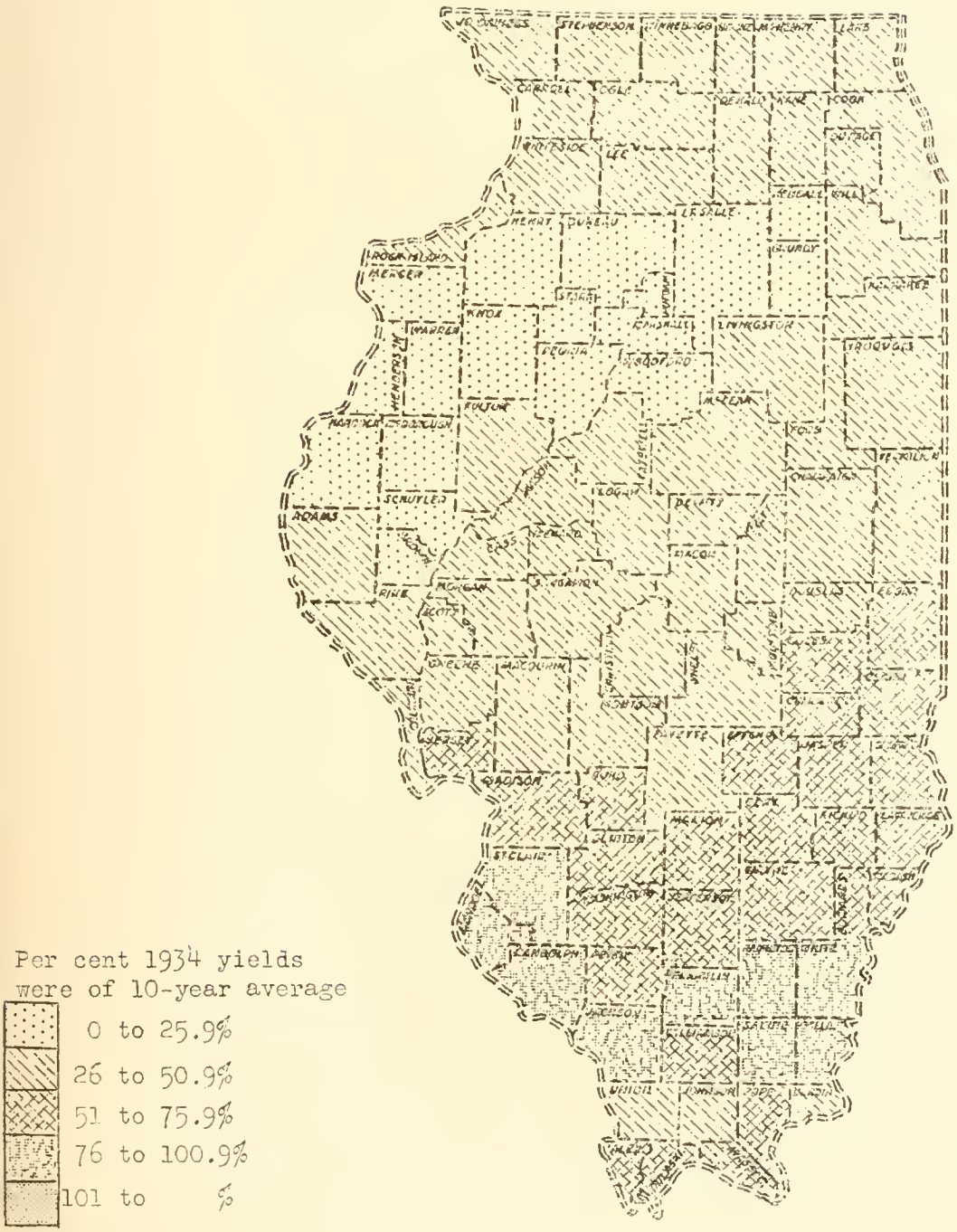


Fig. 4.--1934 Winter Wheat Yields (Expressed as a percentage of the 10-year average yield for each county)

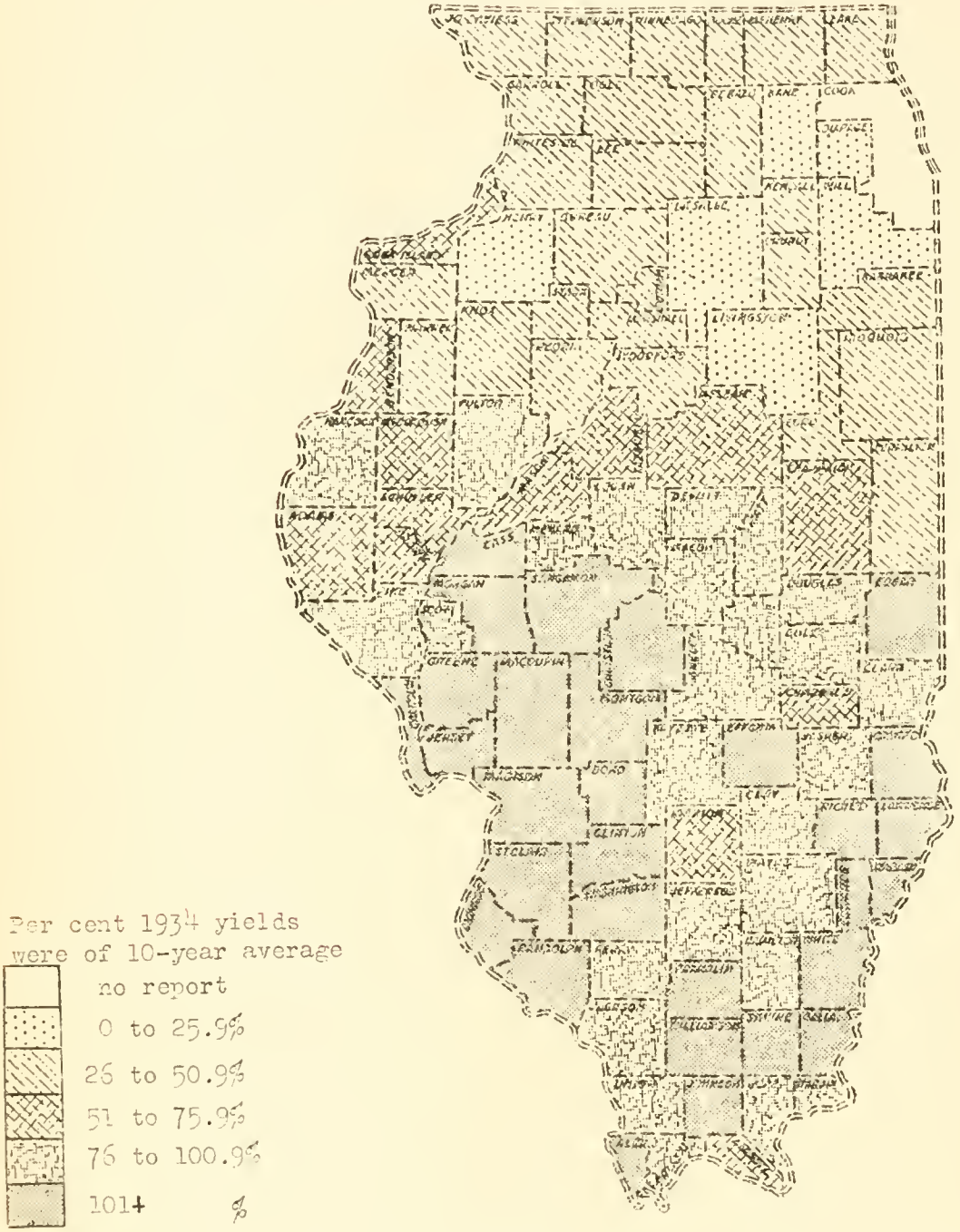


Fig. 5.--1934 Tame Hay Yields (Expressed as a percentage of the 10-year average yield for each county)

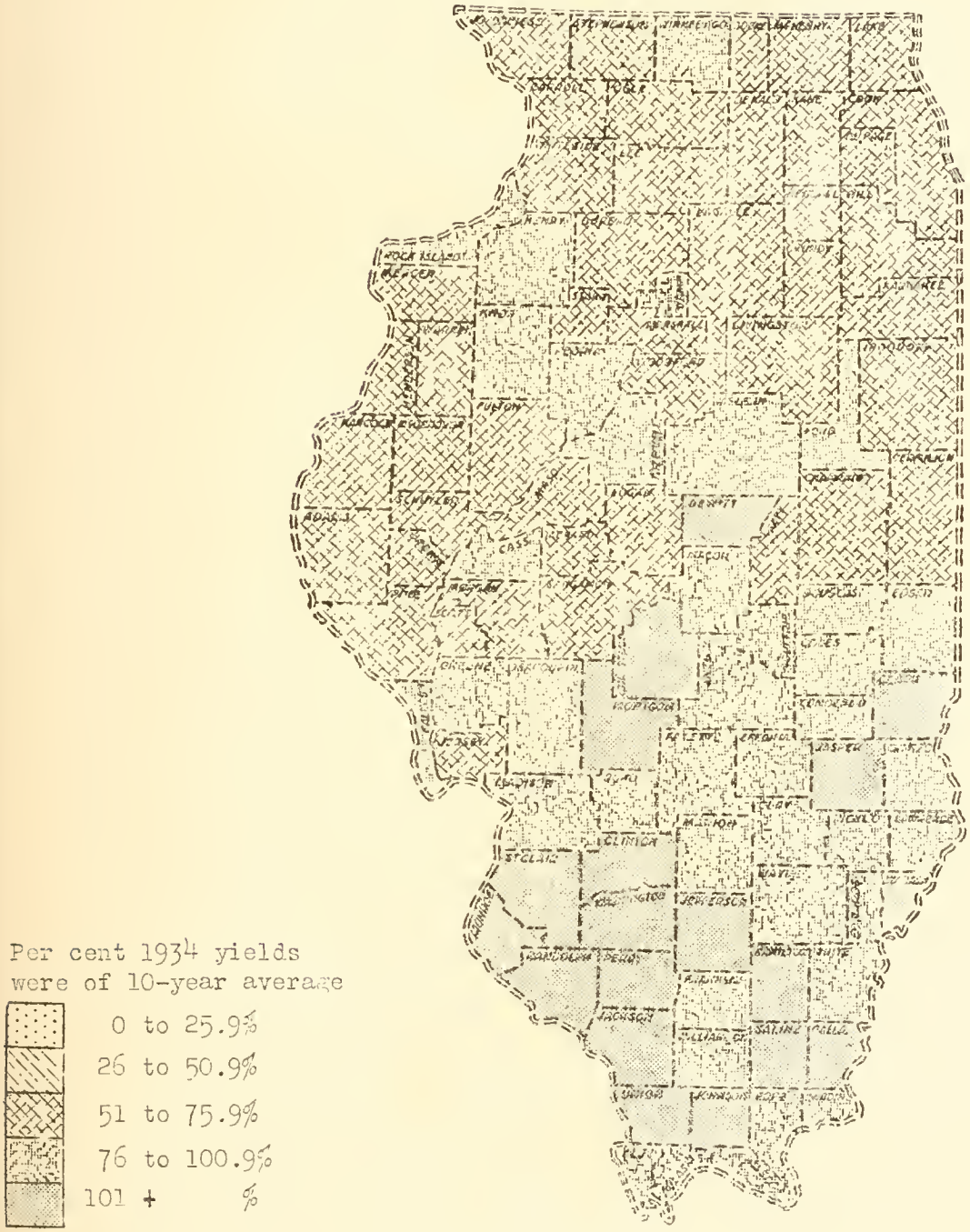
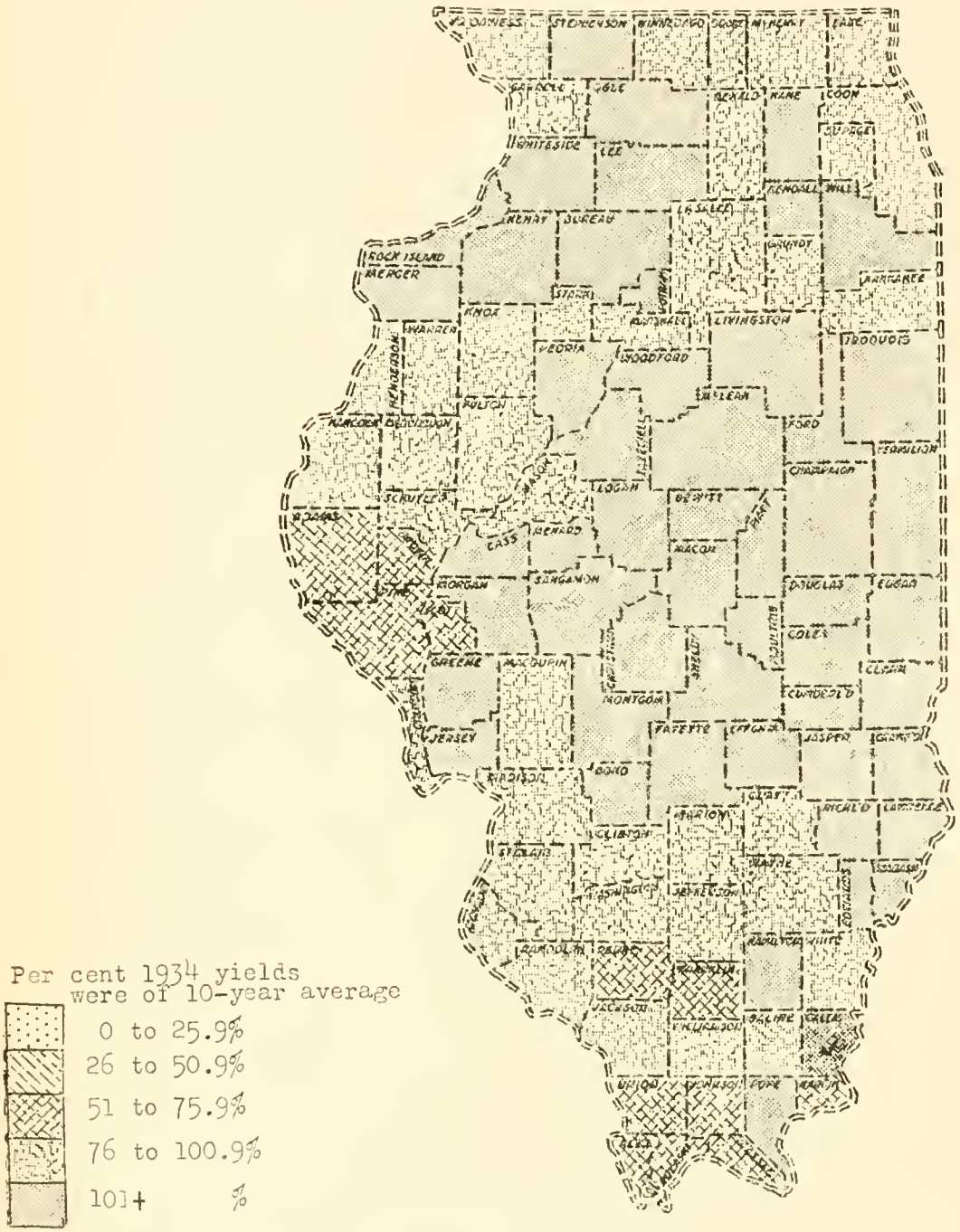


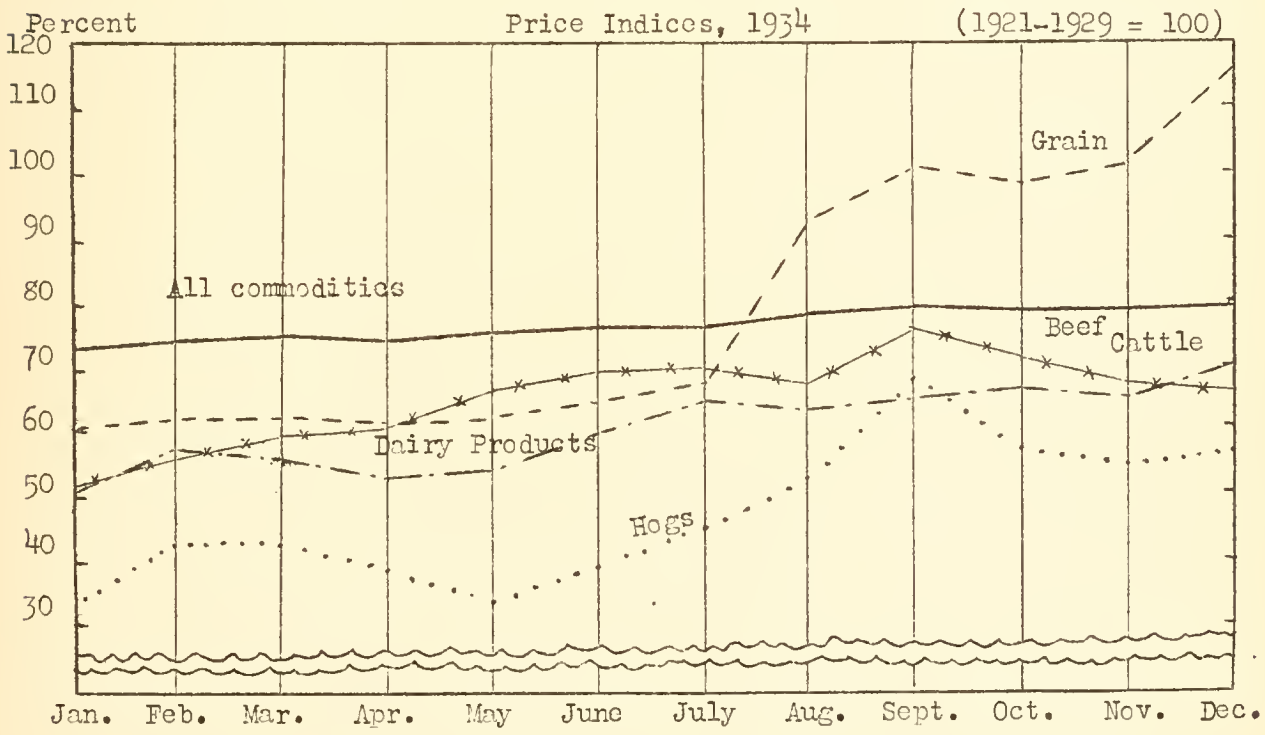
Fig. 6.--1934 Soybean Yields (Expressed as a percentage of the 10-year average yield for each county)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

It is quite evident that the price situation favored those areas that had large quantities of grain to sell and worked a hardship on areas such as the Chicago dairy area where larger than normal feed purchases were necessary because of low yields, and where the price of the chief livestock products (dairy) advanced but little. This combination of circumstances explains the low net cash income for Area I as compared with the other areas of the state. The beef cattle feeders fared better than the dairy men, since beef cattle prices advanced enough during the year to give many feeders a large price spread.

Net Income per Acre by Counties

The combined influence of all factors on farm earnings can be most readily measured by a comparison of the average net income per acre.1/

Net earnings were lowest in the Adams, Brown, Pike area and highest in the central part of the state (Figure 7). The area most favored however, as compared with the average for the last 10 years was the Christian, Shelby, Clark area and the Wabash Valley area, where there was a combination of good to fair crop yields for corn, wheat and soybeans. In these areas there was also a high percentage of these crops sold for cash. The area showing the lowest net income as compared with normal was Area I, the Chicago dairy section.

Variations in Cash Farm Expenditures

As farm incomes declined since 1929, farmers have reduced their cash expenditures. A part of this reduction has been due to the declining price level, but in part at least farmers have done without things which they needed, both for the farm and for the family. In Area IV for instance farmers spent only 45 percent as much to run their business in 1933 as they spent in 1929, while in 1934 they spent 55 percent as much.

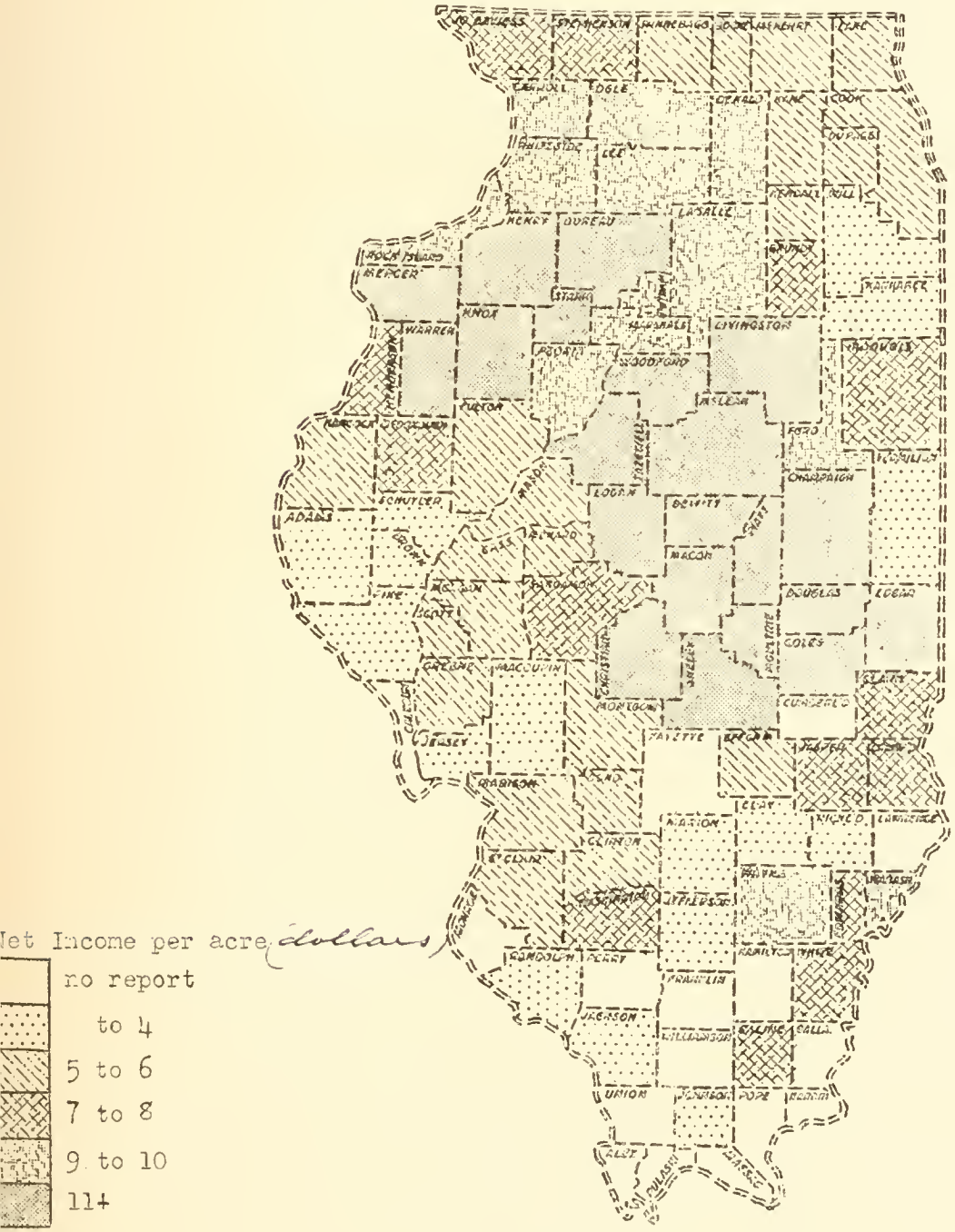
Table 1.--Cash farm expenditures per 100 acres of land in farms for account keepers in type-of-farming area IV, 1929, 1933 and 1934

		1933		1934	
Cash Farm Expenditures	1929		% of 1929		% of 1929
Improvements	$143	$ 38	26.6	$ 52	36.4
Machinery	353	149	42.2	194	55.0
Labor	210	83	39.5	88	41.9
Livestock purchases	297	111	37.3	140	47.1
Feeds	182	79	43.4	144	79.1
Taxes	180	138	76.6	117	65.0
Miscellaneous (crop expense, livestock expense, etc.)	143	74	51.7	94	65.7
Total	$1 508	$672	44.8	$829	55.0

1/ The net income per acre figures used in this comparison include inventory changes.

Fig. 7.-- Average Net income per acre for management, the use of capital and risk for account keepers - 1934

The wide range in farm incomes was due to abnormal crop yields and to the unusual price relationships which existed during the latter half of the year between grain and livestock products.



This increase in expenditures, particularly for improvements and machinery, may be expected to continue if cash incomes improve, since farmers have not been maintaining the condition of either buildings or machinery during the low income period.

AAA BENEFIT PAYMENTS RECEIVED BY
ILLINOIS ACCOUNT KEEPERS DURING
1934

Table 2.

	Corn	Wheat	Hogs
Number of farms with payments.....	1,423	565	1,372
Total amount received.....	$153,195	$75,323	$201,407
Amount received per farm.....	$ 108	$ 133	$ 147

Total number of records.....	1,587
Total benefit payments.....	$429,925
Total per farm.....	$ 271

Benefit payments averaged $271 for each of the 1,587 farms having a summarized account book for 1934. All of these farms did not receive benefit payments. Some did not have AAA contracts. Others with contracts had not received payments because of delay for corrections. The payments entered in the book were only those received up to the time the book was closed and in most cases included one payment on corn and hogs and two or three payments on wheat.

Corn Inventories

January 1, 1934.....2,058 bushels
December 31, 1934.....1,027 bushels

The above figures represent the average per farm for all accounting farms.

Since the inventory price of corn at the end of the year was about twice what it was at the beginning, the total value of corn was practically the same at the beginning and end of the year. The low yield counties in the west central part of the state not only raised less corn and other crops, but fed what surplus they had carried into the year to livestock which was relatively low in price as compared with grain.

TABLE A.—SUMMARY, BY AREAS, OF BUSINESS RECORDS FROM 1,548 ILLINOIS FARMS, 1934

Accounting items	Kendall, DuPage, Lake, Cook, Kane	Boone, Winnebago, McHenry	JoDaviess, Stephenson	DeKalb	Lee, Whiteside, Ogle	Carroll	Rock Island	Henry, Stark, Bureau
Capital investment, total	$33 619	$27 243	$22 819	$31 093	$30 452	$24 577	$27 848	$33 950
Land	22 090	15 088	13 287	19 401	20 014	16 183	18 151	23 676
Farm improvements	5 821	6 430	5 067	5 827	4 837	4 168	4 552	4 739
Machinery and equipment	1 818	1 555	1 379	1 510	1 555	1 079	1 561	1 457
Feed and grain	1 524	1 538	1 085	1 920	1 809	1 377	1 660	1 998
Livestock, total	2 366	2 632	2 001	2 435	2 237	1 770	1 924	2 080
Horses	455	397	317	449	400	349	380	395
Cattle	1 414	1 797	1 317	1 298	1 362	902	849	1 024
Hogs	289	273	221	386	330	383	478	498
Sheep	104	71	56	182	60	42	127	99
Poultry	104	94	90	120	85	94	90	64
Income, net increases, total	$ 3 383	$ 3 535	$ 2 904	$ 3 678	$ 3 907	$ 3 360	$ 3 408	$ 4 194
Feed and grain	333	.....	278	194	707	170	488	884
Corn and wheat, AAA payments	111	76	49	112	113	100	112	138
Labor and miscellaneous	70	72	114	111	88	60	76	96
Livestock, total	2 869	3 387	2 463	3 261	2 999	3 030	2 732	3 076
Horses	.....	12	3	.....	23	38	28	44
Cattle	457	561	486	942	1 152	831	570	870
Hogs	736	563	743	1 052	920	1 110	1 337	1 403
Hogs, AAA payments	103	132	117	145	123	168	181	178
Sheep	91	173	64	133	102	52	94	147
Poultry and eggs	226	220	212	279	187	251	196	170
Dairy sales	1 256	1 726	838	710	492	580	326	264
Expenses, net decreases, total	$ 1 407	$ 1 550	$ 852	$ 1 338	$ 1 159	$ 854	$ 968	$ 1 138
Farm improvements	261	265	169	296	230	200	161	196
Machinery and equipment	416	393	266	366	342	228	302	340
Feed and grain	.....	130	.....	.....	.....	.....	.....	.....
Crop expense	156	155	97	172	119	131	101	122
Hired labor	167	294	106	157	181	85	107	184
Taxes	313	231	146	255	228	154	231	238
Horses	9	.....	.....	12	.....	.....	.....	.....
Livestock and miscellaneous	85	82	68	80	59	56	66	58
Income less expense	$ 1 976	$ 1 985	$ 2 052	$ 2 340	$ 2 748	$ 2 506	$ 2 440	$ 3 056
Total unpaid labor	784	648	799	692	659	766	729	683
Net farm income	$ 1 192	$ 1 337	$ 1 253	$ 1 648	$ 2 089	$ 1 740	$ 1 711	$ 2 373
Rate earned on investment	3.54%	4.91%	5.49%	5.30%	6.86%	7.08%	6.14%	6.99%
Labor and management wage	$ 44	$ 484	$ 646	$ 610	$ 1 084	$ 1 050	$ 855	$ 1 207
Size of farm, acres	206.6	211.0	191.9	188.7	205.0	177.9	187.4	211.7
Tillable land	85.9%	79.8%	69.1%	91.3%	85.3%	84.4%	83.7%	90.2%
Gross income an acre	$ 16.37	$ 16.39	$ 15.13	$ 19.49	$ 19.06	$ 18.89	$ 18.19	$ 19.81
Total expense an acre	10.60	10.05	8.60	10.76	8.87	9.11	9.06	8.60
Net income an acre	5.77	6.34	6.53	8.73	10.19	9.78	9.13	11.21
Acres in—Corn	40.0	28.6	25.0	60.5	49.1	35.3	53.5	64.0
Oats	36.6	21.0	21.7	29.2	32.2	28.0	21.0	36.5
Wheat	4.7	2.9	....	....	....	1.3	3.8	.9
Barley	....	14.6	....	6.5	....	....	....	....
Soybeans	2.8	....	....	5.3	2.0	....	2.1	6.7
Bushels an acre—Corn	18.2	28.1	39.6	27.1	39.6	39.3	35.8	31.3
Oats	12.2	15.2	13.2	14.5	10.3	14.9	4.6	4.3
Wheat	3.4	....	....	....	....	24.2	....	....
Barley	....	8.8	....	10.1	....	....	....	....
Soybeans	....	....	....	....	10.1	....	....	15.5
Returns for $100 of feed	$139	$138	$129	$119	$129	$137	$121	$130
Returns for $100 of poultry	217	220	226	229	213	249	315	236
Dairy sales from each cow	95	100	63	74	59	64	44	43
Returns for each litter	88	85	87	104	103	69	93	111
Investment an acre in livestock	9.63	11.02	9.33	10.88	9.64	9.04	9.25	8.84
Income an acre from livestock	13.89	16.00	12.82	17.28	14.52	16.82	14.43	14.32
Power and machinery cost a crop acre	$ 4.53	$ 4.94	$ 4.43	$ 4.39	$ 3.96	$ 3.76	$ 4.33	$ 3.44
Labor cost for $100 gross income	27	26	29	22	21	24	23	20
Labor cost an acre	6.16	6.93	8.48	5.63	5.76	7.05	6.81	5.54
Expense for $100 gross income	65	61	57	55	47	48	50	43
Excess of sales over expenses	$1 638	$1 613	$1 603	$2 010	$2 056	$1 825	$1 833	$2 354
Increase in inventory	338	372	449	330	692	681	607	702
Value of land an acre	$107	$ 72	$ 69	$103	$ 98	$ 91	$ 97	$112
Total investment an acre	163	129	119	165	149	138	149	160
Number of farms included	42	54	43	35	68	30	35	60

(Table is continued on next page)

TABLE A.—SUMMARY, BY AREAS, OF BUSINESS RECORDS FROM 1,548 ILLINOIS FARMS, 1934—*Continued*

Accounting items	Mercer	Warren, Knox	Henderson	Peoria, Schuyler, Fulton	McDonough	Hancock	Will	Kankakee, Vermilion
Capital investment, total	$32 948	$34 554	$21 277	$22 960	$32 758	$29 557	$28 926	$32 222
Land	22 801	25 026	14 599	15 630	23 501	21 313	19 362	23 208
Farm improvements	4 385	4 224	3 022	3 415	3 758	3 758	4 924	4 326
Machinery and equipment	1 322	1 370	931	1 215	1 503	1 301	1 579	1 433
Feed and grain	1 852	2 053	1 219	1 113	1 969	1 538	1 396	1 861
Livestock, total	2 588	1 881	1 506	1 587	2 027	1 647	1 665	1 394
Horses	419	457	322	413	348	394	370	485
Cattle	1 395	865	654	630	1 025	720	1 065	631
Hogs	615	462	384	425	542	415	138	168
Sheep	92	35	92	46	34	54	8	16
Poultry	67	62	54	73	78	64	84	94
Income, net increases, total	$ 4 600	$ 4 386	$ 3 168	$ 2 638	$ 3 821	$ 3 188	$ 2 640	$ 3 047
Feed and grain	.....	1 218	925	433	93	350	401	1 301
Corn and wheat, AAA payments	128	182	123	105	172	126	185	164
Labor and miscellaneous	101	71	72	97	56	71	61	81
Livestock, total	4 371	2 915	2 048	2 003	3 500	2 641	1 993	1 501
Horses	40	31	42	34	44	15	16	10
Cattle	1 396	917	442	309	999	503	328	308
Hogs	2 115	1 323	1 049	1 044	1 734	1 386	302	433
Hogs, AAA payments	258	188	164	163	268	207	48	75
Sheep	67	74	61	66	42	82	33	34
Poultry and eggs	195	125	111	195	188	161	192	235
Dairy sales	300	257	179	192	225	287	1 074	406
Expenses, net decreases, total	$ 1 497	$ 1 175	$ 856	$ 925	$ 1 293	$ 1 133	$ 1 198	$ 1 277
Farm improvements	263	178	139	189	232	183	232	213
Machinery and equipment	368	326	234	294	367	305	400	387
Feed and grain	201	.....	.....	.....	.....	.....	.....	.....
Crop expense	122	122	109	103	165	138	149	193
Hired labor	224	235	100	108	221	211	159	159
Taxes	245	226	218	182	207	208	195	255
Horses	.....	.....	.....	.....	.....	.....	.....	.....
Livestock and miscellaneous	74	88	56	49	101	88	63	70
Income less expense	$ 3 103	$ 3 211	$ 2 312	$ 1 713	$ 2 528	$ 2 055	$ 1 442	$ 1 770
Total unpaid labor	632	685	673	745	649	690	690	830
Net farm income	$ 2 471	$ 2 526	$ 1 639	$ 968	$ 1 879	$ 1 365	$ 752	$ 940
Rate earned on investment	7.50%	7.31%	7.70%	4.22%	5.73%	4.61%	2.60%	2.92%
Labor and management wage	$ 1 348	$ 1 327	$ 1 115	$ 360	$ 758	$ 400	$ −181	$ −133
Size of farm, acres	221.5	235.8	205.3	200.8	237.3	216.8	195.1	233.9
Tillable land	76.8%	85.1%	78.2%	71.3%	85.7%	87.6%	87.0%	91.0%
Gross income an acre	$ 20.19	$ 18.60	$ 15.43	$ 13.13	$ 16.10	$ 14.70	$ 13.53	$ 13.03
Total expense an acre	9.03	7.89	7.45	8.31	8.18	8.40	9.68	9.01
Net income an acre	11.16	10.71	7.98	4.82	7.92	6.30	3.85	4.02
Acres in—Corn	53.3	66.5	55.3	37.7	63.5	44.7	51.1	66.9
Oats	22.2	26.0	29.4	22.6	23.2	28.4	36.1	49.3
Wheat	....	4.5	3.6	15.1	16.8	8.7	5.6	12.4
Barley	....	....	....	....	....	....	....	....
Soybeans	1.5	18.4	6.1	4.7	11.7	19.9	6.4	8.1
Bushels an acre—Corn	36.1	28.7	27.8	23.4	14.9	10.6	12.7	18.2
Oats	4.8	2.6	5.7	8.9	8.7	10.0	15.1	13.8
Wheat	....	4.0	....	11.5	15.5	20.2	....	5.9
Barley	....	....	....	....	....	....	....	....
Soybeans	....	20.5	17.1	21.6	19.9	....	19.2	....
Returns for $100 of feed	$132	$141	$127	$141	$125	$130	$140	$130
Returns for $100 of poultry	232	198	191	264	244	237	234	240
Dairy sales from each cow	43	47	37	43	45	42	99	63
Returns for each litter	104	110	93	92	108	93	85	81
Investment an acre in livestock	10.86	7.03	6.08	6.03	7.19	6.10	6.60	4.19
Income an acre from livestock	19.55	12.23	9.77	9.81	14.56	12.11	10.13	6.37
Power and machinery cost a crop acre	$ 4.55	$ 3.19	$ 3.04	$ 4.00	$ 3.51	$ 3.67	$ 4.18	$ 3.45
Labor cost for $100 gross income	18	20	24	31	21	27	28	31
Labor cost an acre	6.79	5.56	5.92	6.84	5.31	5.81	5.37	5.15
Expense for $100 gross income	45	42	48	63	51	57	66	69
Excess of sales over expenses	$2 246	$2 499	$1 683	$1 415	$2 307	$1 713	$1 563	$1 396
Increase in inventory	857	712	629	298	221	342	−121	374
Value of land an acre	$103	$106	$ 71	$ 78	$ 99	$ 98	$ 99	$ 99
Total investment an acre	149	147	104	114	138	136	148	138
Number of farms included	43	38	40	39	36	33	35	30

(*Table is continued on next page*)

TABLE A.—SUMMARY, BY AREAS, OF BUSINESS RECORDS FROM 1,548 ILLINOIS FARMS, 1934—*Continued*

Accounting items	Iroquois	Ford	Champaign	DeWitt, Piatt, Logan	Mason, Cass, Menard	Macon	Edgar, Douglas, Clark, Coles	Sangamon
Capital investment, total	$37 675	$44 037	$38 748	$43 033	$29 048	$41 229	$33 985	$40 973
Land	27 435	33 790	30 298	32 860	21 855	31 223	25 369	31 607
Farm improvements	4 695	4 494	3 490	4 323	3 071	4 950	3 837	4 073
Machinery and equipment	1 540	1 525	1 445	1 567	1 055	1 510	1 449	1 434
Feed and grain	2 124	2 614	2 243	2 540	1 727	1 942	1 775	1 578
Livestock, total	1 881	1 614	1 272	1 743	1 340	1 604	1 555	2 281
Horses	676	606	408	629	494	352	382	510
Cattle	736	694	563	718	529	965	775	1 166
Hogs	223	188	205	282	235	173	283	465
Sheep	155	28	18	48	18	23	33	80
Poultry	91	98	78	66	64	91	82	60
Income, net increases, total	$ 3 787	$ 4 686	$ 4 443	$ 5 817	$ 3 369	$ 4 995	$ 4 766	$ 4 253
Feed and grain	1 474	2 806	2 699	3 603	1 536	3 120	2 258	897
Corn and wheat, AAA payments	121	172	156	225	276	188	160	263
Labor and miscellaneous	113	110	97	90	81	104	90	76
Livestock, total	2 079	1 598	1 491	1 899	1 476	1 583	2 258	3 017
Horses	58	71	8	61	41	11	37	56
Cattle	550	340	297	640	232	482	748	954
Hogs	557	507	598	622	661	504	832	1 394
Hogs, AAA payments	107	84	79	125	133	68	124	179
Sheep	89	43	48	65	20	26	23	112
Poultry and eggs	234	248	156	151	166	197	207	138
Dairy sales	484	305	305	235	223	295	287	184
Expenses, net decreases, total	$ 1 246	$ 1 315	$ 1 163	$ 1 603	$ 1 171	$ 1 480	$ 1 316	$ 1 568
Farm improvements	240	277	181	238	166	209	210	297
Machinery and equipment	299	346	336	437	302	371	303	373
Feed and grain	.....	.....	.....	.....	.....	.....	.....	.....
Crop expense	131	134	136	200	154	200	211	178
Hired labor	189	189	171	277	191	264	271	354
Taxes	311	306	290	360	292	386	256	290
Horses	.....	.....	.....	.....	.....	.....	.....	.....
Livestock and miscellaneous	76	63	49	91	66	50	65	76
Income less expense	$ 2 541	$ 3 371	$ 3 280	$ 4 214	$ 2 198	$ 3 515	$ 3 450	$ 2 685
Total unpaid labor	788	753	620	680	672	638	634	617
Net farm income	$ 1 753	$ 2 618	$ 2 660	$ 3 534	$ 1 526	$ 2 877	$ 2 816	$ 2 068
Rate earned on investment	4.65%	5.94%	6.86%	8.21%	5.25%	6.98%	8.3%	5.05%
Labor and management wage	$ 386	$ 952	$ 1 245	$ 1 893	$ 610	$ 1 323	$ 1 593	$ 508
Size of farm, acres	254.9	270.8	231.9	296.9	262.8	248.7	247.6	275.5
Tillable land	91.4%	94.2%	95.5%	94.7%	86.3%	90.9%	88.0%	92.4%
Gross income an acre	$ 14.86	$ 17.30	$ 19.16	$ 19.59	$ 12.82	$ 20.08	$ 19.53	$ 15.44
Total expense an acre	7.98	7.64	7.69	7.69	7.01	8.51	7.88	7.93
Net income an acre	6.88	9.66	11.47	11.90	5.81	11.57	11.37	7.51
Acres in—Corn	76.4	91.8	74.3	86.6	63.1	71.7	61.1	72.6
Oats	56.4	71.0	41.6	37.9	24.1	24.1	24.8	29.7
Wheat	1.2	3.3	11.8	24.6	46.0	26.4	28.4	28.5
Barley	....	....	....	....	....	....	....	....
Soybeans	8.5	8.8	33.4	40.5	9.0	34.9	21.6	22.6
Bushels an acre—Corn	22.9	29.4	25.3	33.1	21.2	29.1	33.0	12.4
Oats	15.0	13.0	12.9	14.2	9.9	13.5	19.3	10.9
Wheat	....	....	20.6	23.1	17.1	27.2	22.0	25.9
Barley	....	....	....	....	....	....	....	....
Soybeans	18.1	....	25.8	25.8	17.2	26.9	28.0	18.3
Returns for $100 of feed	$133	$142	$128	$121	$109	$127	$132	$136
Returns for $100 of poultry	244	230	191	222	259	221	236	223
Dairy sales from each cow	65	51	49	38	43	56	42	43
Returns for each litter	114	94	91	74	93	93	98	74
Investment an acre in livestock	5.33	3.99	4.04	4.10	3.25	5.01	4.92	6.64
Income an acre from livestock	7.93	5.66	6.39	6.19	5.46	6.32	8.97	10.75
Power and machinery cost a crop acre	$ 2.65	$ 2.42	$ 2.86	$ 3.13	$ 2.75	$ 2.98	$ 2.68	$ 3.27
Labor cost for $100 gross income	26	19	17	15	24	17	18	22
Labor cost an acre	5.04	4.27	4.13	4.05	4.46	4.48	5.00	4.86
Expense for $100 gross income	54	44	40	39	55	42	41	51
Excess of sales over expenses	$2 407	$2 988	$2 723	$2 896	$2 099	$2 814	$2 539	$2 299
Increase in inventory	134	383	557	1 318	99	701	911	386
Value of land an acre	$108	$125	$131	$111	$ 83	$126	$102	$114
Total investment an acre	148	163	167	145	111	166	137	149
Number of farms included	31	39	38	32	51	36	57	31

(Table is continued on next page)

TABLE A.—SUMMARY, BY AREAS, OF BUSINESS RECORDS FROM 1,548 ILLINOIS FARMS, 1934—*Continued*

Accounting items	Shelby, Moultrie	Christian	Adams	Pike, Brown	Morgan, Scott, Greene	Macoupin	Jersey	Effingham
Capital investment, total	$31 787	$32 885	$26 702	$25 515	$33 138	$19 281	$20 176	$12 652
Land	23 753	24 896	19 081	17 604	24 736	12 544	13 192	7 599
Farm improvements	3 293	3 328	3 710	3 434	3 602	2 996	2 900	1 893
Machinery and equipment	1 265	1 644	1 018	979	1 306	1 100	1 336	930
Feed and grain	1 922	1 911	1 231	1 431	1 697	1 111	1 291	939
Livestock, total	1 554	1 106	1 662	2 067	1 797	1 530	1 457	1 291
Horses	375	327	409	348	440	392	414	327
Cattle	817	394	739	1 144	858	777	659	708
Hogs	218	291	410	461	390	219	281	92
Sheep	62	31	45	69	38	55	37	32
Poultry	82	63	59	45	71	87	66	132
Income, net increases, total	$ 5 069	$ 4 735	$ 2 701	$ 3 055	$ 3 586	$ 2 429	$ 2 434	$ 2 169
Feed and grain	2 913	2 820	.....	.....	772	356	430	799
Corn and wheat, AAA payments	173	129	107	106	272	135	149	69
Labor and miscellaneous	95	92	148	63	70	74	89	80
Livestock, total	1 888	1 694	2 446	2 886	2 472	1 864	1 766	1 221
Horses	29	24	39	36	30	17	4	31
Cattle	301	237	592	849	696	371	225	209
Hogs	669	881	1 254	1 501	1 149	555	707	224
Hogs, AAA payments	135	132	183	237	186	105	134	32
Sheep	76	48	47	90	54	75	40	41
Poultry and eggs	199	132	130	77	118	204	142	287
Dairy sales	479	240	201	96	239	537	514	397
Expenses, net decreases, total	$ 1 317	$ 1 283	$ 1 309	$ 1 603	$ 1 343	$ 1 000	$ 979	$ 542
Farm improvements	217	137	178	199	184	138	224	114
Machinery and equipment	335	414	298	246	374	314	279	136
Feed and grain	.....	.....	265	608	.....	.....	.....	.....
Crop expense	194	168	128	130	183	134	129	83
Hired labor	248	216	135	151	259	170	108	57
Taxes	264	297	221	194	284	187	187	105
Horses	.....	.....	.....	.....	.....	.....	.....	.....
Livestock and miscellaneous	59	51	84	75	59	57	52	47
Income less expense	$ 3 752	$ 3 452	$ 1 392	$ 1 452	$ 2 243	$ 1 429	$ 1 455	$ 1 627
Total unpaid labor	745	704	767	683	692	771	785	598
Net farm income	$ 3 007	$ 2 748	$ 625	$ 769	$ 1 551	$ 658	$ 670	$ 1 029
Rate earned on investment	9.5%	8.36%	2.34%	3.01%	4.68%	3.41%	3.32%	8.13%
Labor and management wage	$ 1 950	$ 1 628	$ −170	$ 8	$ 406	$ 221	$ 170	$ 804
Size of farm, acres	271.3	237.0	242.7	249.7	275.7	227.5	202.0	210.8
Tillable land	89.0%	93.2%	82.8%	75.5%	81.0%	82.6%	81.0%	84.0%
Gross income an acre	$ 18.68	$ 19.98	$ 10.69	$ 11.81	$ 13.01	$ 10.68	$ 12.07	$ 10.29
Total expense an acre	7.60	8.39	8.11	8.73	7.38	7.79	8.75	5.41
Net income an acre	11.08	11.59	2.58	3.08	5.63	2.89	3.32	4.88
Acres in—Corn	64.5	59.0	50.2	48.6	68.1	44.8	44.6	32.3
Oats	20.7	15.0	19.9	17.3	19.7	14.2	13.7	19.5
Wheat	20.0	25.9	17.3	13.3	42.8	27.2	32.5	17.7
Barley	....	....	....	....	....	....	....	....
Soybeans	42.3	64.1	9.4	....	9.8	17.2	7.1	10.6
Bushels an acre—Corn	30.4	21.5	5.6	5.9	11.7	8.1	8.5	25.4
Oats	10.9	11.3	4.0	6.9	18.7	8.5	13.8	7.5
Wheat	22.1	26.2	14.8	17.6	25.0	21.6	20.9	17.2
Barley	....	....	....	....	....	....	....	....
Soybeans	27.1	26.2	....	....	15.3	15.5	13.5	....
Returns for $100 of feed	$131	$126	$133	$120	$107	$127	$112	$131
Returns for $100 of poultry	237	194	209	175	171	234	209	219
Dairy sales from each cow	51	44	38	26	50	65	60	48
Returns for each litter	93	90	99	91	79	78	78	90
Investment an acre in livestock	4.92	3.73	5.06	7.11	4.94	5.11	5.01	4.76
Income an acre from livestock	6.85	7.05	9.92	11.41	8.86	8.12	8.74	5.65
Power and machinery cost a crop acre	$ 2.60	$ 2.99	$ 3.51	$ 3.22	$ 3.44	$ 3.50	$ 3.82	$ 2.17
Labor cost for $100 gross income	19	18	32	26	26	37	35	28
Labor cost an acre	5.00	4.58	6.06	6.34	5.21	6.21	6.67	4.90
Expense for $100 gross income	41	42	76	74	57	73	72	53
Excess of sales over expenses	$2 066	$2 764	$1 634	$1 759	$2 296	$1 343	$1 508	$961
Increase in inventory	1 686	688	−242	−307	−53	86	−53	666
Value of land an acre	$ 88	$105	$ 79	$ 71	$ 90	$ 55	$ 65	$ 36
Total investment an acre	117	139	110	102	120	85	100	60
Number of farms included	31	36	31	32	57	45	32	38

(*Table is concluded on next page*)

TABLE A.—SUMMARY, BY AREAS, OF BUSINESS RECORDS FROM 1,548 ILLINOIS FARMS, 1934—*Concluded*

Accounting items	Clinton, Bond, Monroe, Montgomery		Madison	St. Clair	Randolph	Jefferson, Edwards, Wabash, Jackson, Marion, White, Saline, Crawford, Richland, Clay, Washington, Wayne, Johnson		
	General farms	Dairy farms				Lower-valued land	Higher-valued land	Dairy farms
Capital investment, total	$16 969	$16 413	$15 772	$18 374	$13 281	$9 783	$18 826	$13 508
Land	11 272	9 901	9 374	11 824	7 723	5 970	13 024	7 834
Farm improvements	2 483	2 804	2 759	2 895	2 399	1 538	2 491	2 377
Machinery and equipment	1 057	1 160	1 305	1 174	1 126	631	885	996
Feed and grain	1 066	1 002	1 035	1 117	1 003	743	1 323	982
Livestock, total	1 091	1 546	1 299	1 364	1 030	901	1 103	1 319
Horses	357	412	320	396	304	313	396	290
Cattle	424	831	735	622	519	340	336	796
Hogs	161	144	132	171	95	110	254	134
Sheep	29	19	14	49	14	41	34	1
Poultry	120	140	98	126	98	97	83	98
Income, net increases, total	$ 2 571	$ 2 540	$ 2 400	$ 2 551	$ 2 143	$ 1 852	$ 4 079	$ 2 629
Feed and grain	1 270	773	671	699	831	831	2 444	654
Corn and wheat, AAA payments	153	146	147	169	151	63	192	81
Labor and miscellaneous	58	60	80	65	56	64	63	118
Livestock, total	1 090	1 561	1 502	1 618	1 105	894	1 380	1 776
Horses	.....	27	19	22	15	32	26	70
Cattle	167	84	127	163	168	121	154	195
Hogs	342	281	255	355	181	255	642	397
Hogs, AAA payments	59	50	54	61	25	55	100	66
Sheep	48	32	21	54	29	41	52	2
Poultry and eggs	278	254	261	373	207	258	243	258
Dairy sales	196	833	765	590	480	132	163	788
Expenses, net decreases, total	$ 897	$ 863	$ 937	$ 919	$ 665	$ 516	$ 1 039	$ 744
Farm improvements	130	165	171	163	107	82	144	111
Machinery and equipment	234	227	242	227	210	131	207	205
Feed and grain	.....	.....	.....	.....	.....	.....	.....	.....
Crop expense	162	155	152	186	133	110	184	124
Hired labor	163	143	155	129	57	68	278	137
Taxes	149	133	165	152	119	95	184	117
Horses	17	.....	.....	.....	.....	.....	.....	.....
Livestock and miscellaneous	42	40	52	62	39	30	42	50
Income less expense	$ 1 674	$ 1 677	$ 1 463	$ 1 632	$ 1 478	$1 336	$ 3 040	$ 1 885
Total unpaid labor	612	654	669	680	661	546	564	608
Net farm income	$ 1 062	$ 1 023	$ 794	$ 952	$ 817	$ 790	$ 2 476	$ 1 277
Rate earned on investment	6.26%	6.23%	5.03%	5.18%	6.15%	8.08%	13.15%	9.45%
Labor and management wage	$ 646	$ 589	$ 416	$ 443	$ 562	$ 687	$ 1 939	$ 983
Size of farm, acres	195.9	205.2	162.6	164.8	188.5	184.0	234.2	233.3
Tillable land	83.7%	83.96%	84.5%	84.8%	83.4%	85.3%	85.7%	87.2%
Gross income an acre	$ 13.39	$ 12.38	$ 14.76	$ 15.48	$ 11.36	$ 10.07	$ 17.42	$ 11.27
Total expense an acre	7.71	7.39	9.88	9.70	7.03	5.78	6.85	5.80
Net income an acre	5.41	4.99	4.88	5.78	4.33	4.29	10.57	5.47
Acres in—Corn	33.7	20.7	29.7	29.5	26.1	27.6	55.4	29.5
Oats	20.0	22.9	11.2	20.0	14.3	12.3	18.6	19.4
Wheat	43.2	34.7	35.7	35.3	44.7	20.2	47.0	26.6
Barley	....	....	....	....	....	....	....	....
Soybeans	....	....	1.4	.5	.6	4.4	1.5	4.9
Bushels an acre—Corn	15.5	18.1	12.7	9.3	16.5	29.1	36.2	26.5
Oats	21.0	18.4	11.8	29.7	25.8	17.8	33.0	14.9
Wheat	26.4	22.3	24.1	24.3	18.9	19.6	26.0	18.9
Barley	....	....	....	....	....	....	....	....
Soybeans	....	....	....	....	....	11.9	....	....
Returns for $100 of feed	$114	$118	$121	$120	$102	$116	$114	$121
Returns for $100 of poultry	232	184	249	296	213	248	276	250
Dairy sales from each cow	45	64	67	74	51	25	32	55
Returns for each litter	75	88	77	76	74	89	76	93
Investment an acre in livestock	3.87	5.35	5.90	5.72	3.84	3.36	3.13	4.48
Income an acre from livestock	5.56	7.48	9.12	9.68	5.78	4.68	5.78	7.31
Power and machinery cost a crop acre	$ 3.57	$ 3.72	$ 4.00	$ 4.19	$ 3.50	$ 2.27	$ 2.76	$ 2.30
Labor cost for $100 gross income	28	28	33	30	31	30	13	26
Labor cost an acre	5.43	5.68	7.32	7.01	5.91	5.19	3.30	4.96
Expense for $100 gross income	58	60	67	63	62	57	39	51
Excess of sales over expenses	$1 145	$1 291	$1 188	$1 380	$1 111	$831	$1 650	$1 430
Increase in inventory	529	386	275	252	367	505	1 390	455
Value of land an acre	$ 58	$ 48	$ 58	$ 72	$ 41	$ 32	$ 56	$ 34
Total investment an acre	87	80	97	111	70	53	80	58
Number of farms included	38	35	49	32	33	56	17	10

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ANNUAL FARM BUSINESS REPORTS PREPARED FROM RECORDS KEPT IN THE ILLINOIS FARM FINANCIAL RECORD BOOK FOR 37 AREAS FOR 1934

Prepared by the Department of Agricultural Economics
of the University of Illinois

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ANNUAL FARM BUSINESS REPORT ON THIRTY-FIVE FARMS IN DEKALB COUNTY, ILLINOIS, 1934

P. E. Johnston, J. E. Wills, and J. B. Andrews*

The farm earnings of 35 account-keeping farmers in DeKalb County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 35 accounts show for 1934 an average net income of $1,648 per farm, as compared with an average of $1,563 in 1933 and an average net loss of $473 in 1932. The average cash income in 1934 was $4,933 per farm, the cash business expenditures $2,923 per farm, leaving a cash balance of $2,010 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income there was an inventory increase of $330 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,340 per farm. The inventory increase was a smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average and were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

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* R. M. Rasmusen, farm adviser in DeKalb County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report and was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 35 accounting farms the most successful third shows an average net income of $2,846 while the average net income of the least successful third of the farms was only $500. In 1933 the comparable net incomes for the two groups was $2,522 and $508 respectively.

Investments, Receipts, Expenses, and Earnings on
35 DeKalb County Farms in 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		19 401	17 737	17 976
Farm improvements		5 827	5 449	5 354
Livestock total		2 435	2 523	2 451
Horses		449	400	466
Cattle		1 298	1 667	1 347
Hogs		386	331	448
Sheep		182	20	51
Poultry		120	105	139
Machinery and equipment		1 510	1 446	1 453
Feed and grain		1 920	2 471	1 513
Total capital investment	$	$31 093	$22 626	$29 257
RECEIPTS AND NET INCREASES				
Livestock total		3 261	3 702	2 570
Horses		---	---	6
Cattle		942	1 452	706
Hogs (including AAA payments)		1 147	1 120	978
Sheep		133	26	38
Poultry		68	70	81
Egg sales		211	206	228
Dairy sales		710	828	533
Feed and grain (including AAA payments)		306	885	---
Labor off farm		110	172	40
Miscellaneous receipts		1	1	---
Total receipts & net increases	$	$ 3 678	$ 4 760	$ 2 610
EXPENSES AND NET DECREASES				
Farm improvements		296	258	305
Horses		12	1	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		366	290	388
Feed and grain		---	---	166
Livestock expense		57	60	52
Crop expense		172	204	139
Hired labor		157	141	147
Taxes		255	257	235
Miscellaneous expenses		23	22	26
Total expenses & net decreases	$	$ 1 338	$ 1 233	$ 1 458
RECEIPTS LESS EXPENSES	$	$ 2 340	$ 3 527	$ 1 152
Total unpaid labor		692	681	652
Operator's labor		517	540	518
Family labor		175	141	134
Net income from investment and management		1 648	2 846	500
RATE EARNED ON INVESTMENT	%	5.30%	9.61%	1.71%
Return to capital and operator's labor and management		2 165	3 336	1 018
5% of capital invested		1 555	1 481	1 463
LABOR AND MANAGEMENT WAGE	$	$ 610	$ 1 905	$ -445

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19 and over.	2	$7.	5
17	2	5.	7
15	3	3.	2
13	2	1.	3
11	2	-1.	1
9	6		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 182.2 acres each, the least successful 169.8 acres. This difference in size accounts in part for the variation in the receipts, and expenses in the two groups. Difference in receipts from the sales of grains and livestock accounts for much of the difference in income between the two groups. The total expense per acre, including the charge for family labor, on the least profitable farms was $12.43 as compared with $10.51 on the most profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	2 216	1 100
Average of 13 most successful farms . .	3 274	1 866
Average of 13 least successful farms .	1 453	631
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. This larger inventory of corn, with the rise in grain prices, was one of the important factors accounting for the difference in farm earnings.

The average inventory increase for the accounting farms in DeKalb County was $330 in 1934 as compared with $449 in 1933 and an inventory loss of $1,064 a farm in 1932. There were increases of $114 in total livestock, $317 in feed and grain, and $71 in machinery, while improvements showed a decrease of $172. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	2 435	2.549	114	
Feed and grains	1 920	2.237	317	
Machinery	1 510	1 581	71	
Improvements (except residence)	5 827	5 655	-172	
Total	11 692	12 022	330	

Some Adjustments on DeKalb County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year. Total operating expenses were 48 cents an acre lower in 1934 than in 1933, while cash operating expenses were $2,923 a farm in 1934 as compared with $2,020 in 1933. The largest increase in expenditures over the previous year was for feed, grain, machinery and supplies for machinery. Indications point to an even greater expansion of spending for machinery in 1935 since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in DeKalb County 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	1929	Your farm 1934	Average cash income per farm 1934	1929
Livestock		903	3.061		4 043	8 496
Feed and grains		677	760		666	380
Machinery		550	846		113	118
Improvements		124	349		---	---
Labor		157	505		110	57
Miscellaneous		23	39		1	8
Livestock expense		57	81		---	---
Crop expense		172	256		---	---
Taxes		255	381		---	---
		2 923	6 273		4 933	9 659
Excess of cash sales over expenses					2 010	3 3[illegible]1
Increase in inventory					330	566
Income to labor and capital (Receipts less expenses)					2 340	3 947

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 51.1 percent of that in 1929, cash expenditures were only 46.6 percent as large. In 1934 livestock purchases were 29.7 percent and feed and grain purchases 89.1 percent as large as in 1929. In 1934 these farms paid out 65.0 percent as much for machinery and 67.2 percent as much for crop expense as in 1929, while taxes were reduced to only 66.9 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $15.62 as compared with $2.94 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were larger and carried larger inventories of grain and livestock on which to make a profit when prices advanced. The inventory increase was $1,117 on the most profitable farms as compared with an inventory loss of $611 on the least profitable farms.

The most profitable farms had an investment per acre in livestock of $12.74 as compared with $10.31 for the least profitable group. The income per acre was $20.32 and $15.10 respectively. On the basis of $100 of feed fed to productive livestock the income for the most profitable farms was $130 as compared with $98.

The total operating costs on the acre basis were slightly higher on the least profitable farms. The power and machinery cost was an important factor in accounting for this difference.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check in included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	10	138	1	139	11	125	241
1/3 least profitable farms	11	99	3	35	11	144	231
All accounting farms	29	125	4	78	32	159	259

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay all of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 22.1 contracted acres which were used as follows: .4 idle; 6.3 red clover; 1.5 sweet clover; 10.1 soybeans; .4 alfalfa and 3.4 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as most of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
35 DeKalb County Farms in 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
Size of farms--acres	____	188.7	182.2	169.8
Percent of land area tillable	____	91.3%	95.5%	91.9%
Percent of tillable land in hay and pasture	____	35.3	40.2	30.6
Gross receipts per acre	____	19.49	26.13	15.37
Total expenses per acre	____	10.76	10.51	12.43
Net receipts per acre	____	8.73	15.62	2.94
Value of land per acre	____	103	97	106
Total investment per acre	____	165	163	172
Acres in Corn	____	60.5	58.8	54.9
Oats	____	29.2	23.3	32.3
Barley	____	6.5	4.1	5.5
Soybeans	____	5.3	8.6	5
Hay	____	32.3	39.5	24.5
Tillable pasture	____	23.5	30.5	23.3
Crop yields--Corn, bu. per acre	____	27.1	27.9	26.4
Oats, bu. per acre	____	14.5	11.5	17.2
Barley, bu. per acre	____	10.1	14.1	10.0
Value of feed fed to productive L.S.	____	2 741	2 851	2 620
Returns per $100 of feed fed to productive livestock	____	119	130	98
Returns per $100 invested in:				
Cattle	____	122	128	105
Poultry	____	229	251	227
Pigs weaned per litter	____	6	5.5	6.4
Income per litter farrowed	____	104	108	92
Dairy sales per dairy cow	____	74	88	57
Investment in productive L.S. per A.	____	10.88	12.74	10.31
Receipts from productive L.S. per A.	____	17.28	20.32	15.10
Man labor cost per crop acre	____	5.63	5.48	5.72
Machinery cost per crop acre	____	2.55	2.02	2.92
Power and mach. cost per crop A.	____	4.39	3.74	4.65
Farms with tractor	____	77%	67%	75%
Value of feed fed to horses	____	253	246	235
Man labor cost per $100 gross income	____	22	16	29
Expenses per $100 gross income	____	55	40	81
Farm improvements cost per acre	____	1.57	1.42	1.80
Excess of sales over cash expenses	____	2 010	2 410	1 763
Increase in inventory	____	330	1 117	-611
RATE EARNED ON INVESTMENT	____	5.30%	9.61%	1.71%
Gross receipts per farm	____	3 678	4 760	2 610

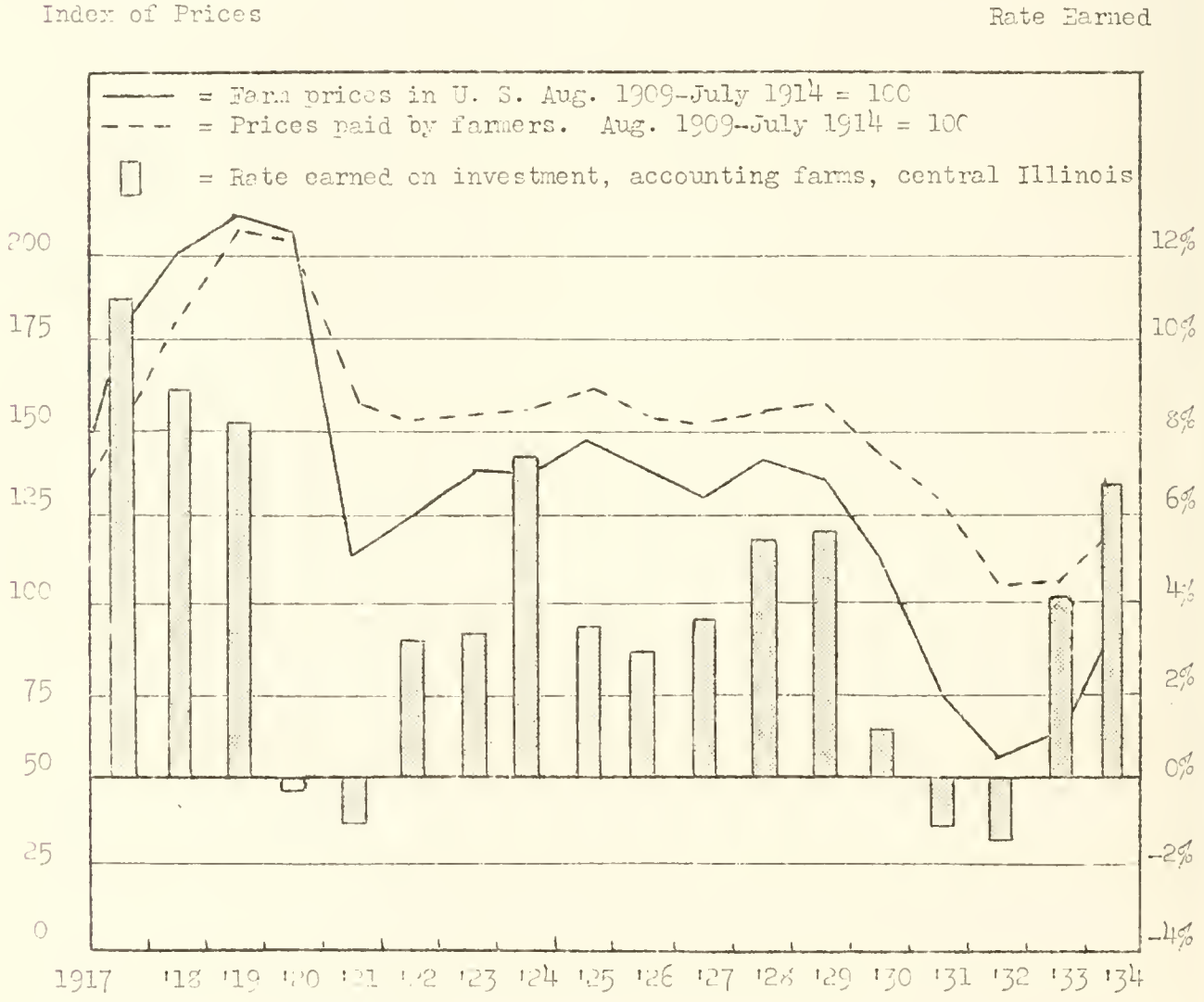
Chart for Studying the Efficiency of Various Parts of Your Business, DeKalb County, 1934

The numbers above the lines across the middle of the page are the averages for the 35 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Barley	Hogs: Income per litter	Dairy sales per dairy cows	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
10.30	52	40	20	180	124	380	270	3.10	1.90	--	2330	6000	39	8200	340
9.30	47	35	18	165	114	350	240	3.60	2.40	2	1930	5200	35	7300	310
8.30	42	30	16	150	104	320	210	4.10	2.90	7	1530	4400	31	6400	280
7.30	37	25	14	135	94	290	180	4.60	3.40	12	1130	3600	27	5500	250
6.30	32	20	12	120	84	260	150	5.10	3.90	17	730	2800	23	4600	220
5.30	27.1	14.5	10.1	104	74	229	119	5.63	4.39	22	330	2010	19	3678	189
4.30	22	10	3	90	64	200	90	6.10	4.90	27	-130	1200	15	2800	160
3.30	17	5	6	75	54	170	60	6.60	5.40	32	-530	400	11	1900	130
2.20	12	--	4	60	44	140	30	7.10	5.90	37	-930	-400	7	1000	100
1.20	7	--	2	45	34	110	0	7.60	6.40	42	-1330	-1200	3	100	70
.20	2	--	--	30	24	80	--	8.10	6.90	47	-1730	-2000	--	--	40

Influence of Price Changes on Farm Earnings

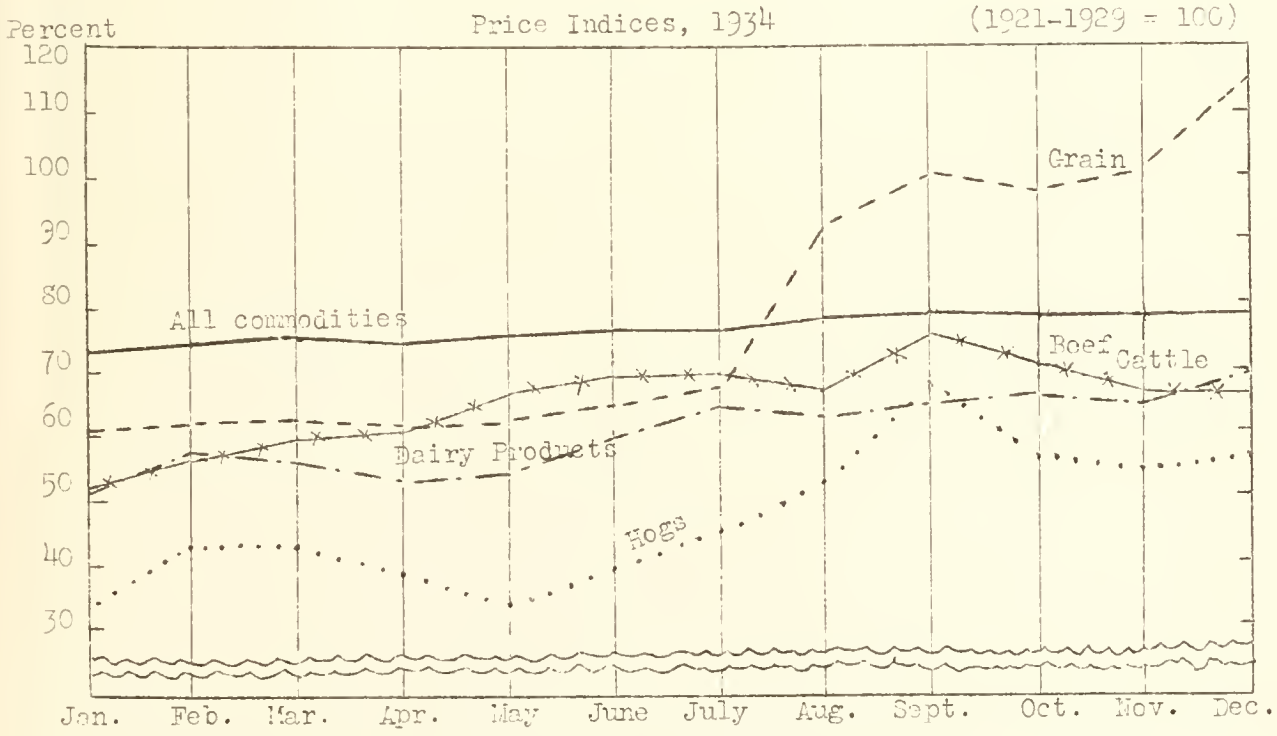
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in DeKalb County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last four and were 59 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five. Thus profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in DeKalb County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	45	50	50	36	35
Average size of farms, acres	220	202	199	177	189
Average rate earned, to pay for management, risk and capital	2.8%	-1.3%	-1.3%	5.2%	5.3%
Average labor and management wage	$-341	$-1 891	$-1 761	$606	$610
Gross income per acre	20.77	12.49	10.68	20.09	19.49
Operating cost per acre	14.68	14.99	13.05	11.24	10.76
Average value of land per acre	131	119	114	105	103
Total investment per acre	217	195	182	170	165
Investment per farm in:					
Total livestock	5 395	4 104	3 068	2 606	2 435
Cattle	3 076	2 109	1 796	1 480	1 298
Hogs	1 263	1 172	603	484	386
Poultry	187	181	139	93	182
Gross income per farm	4 562	2 522	2 127	3 547	3 678
Income per farm from:					
Crops	41	---	---	1 216	306
Miscellaneous income	57	46	39	35	1
Total livestock	4 464	2 476	2 088	2 296	3 261
Cattle	1 132	461	561	711	942
Dairy sales	963	824	662	534	710
Hogs	2 028	898	630	305	1 197
Poultry	293	253	171	167	68
Average yield of corn in bu.	44	47	60	50	27
Average yield of oats in bu.	56	50	56	43	14

ANNUAL FARM BUSINESS REPORT ON THIRTY-FIVE FARMS IN WILL COUNTY, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and J. B. Andrews*

The farm earnings of 35 account-keeping farmers in Will County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 35 accounts show for 1934 an average net income of $752 per farm, as compared with an average of $692 in 1933, and an average net loss of $224 in 1932. The average cash income in 1934 was $3 261 per farm, the cash business expenditures $1 698 per farm, leaving a cash balance of $1 563 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) An inventory decrease of $121 per farm occurred in 1934 when, chiefly because of reduced yields resulting from the drouth, the increase in the feed and grain inventory was not sufficient to offset the decreases in the farm improvements and machinery. This decrease, subtracted from the cash balance, resulted in an average excess of receipts over expenses of $1,442 per farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average and, were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* L. W. Braham, farm adviser in Will County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 35 accounting farms, the most successful third shows an average net income of $1,618, while the average net loss of the least successful third of the farms was $207. In 1933 the comparable net incomes for the two groups were $1,466, and $-57 respectively. Figured on a cash basis the most successful farms had on an average $1,056 more cash income left with which to meet interest payments and family living expenses, than did the least successful farms.

Investments, Receipts, Expenses and Earnings on
35 Will County Farms in 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		19 362	17 441	21 455
Farm improvements		4 924	4 062	5 309
Livestock total		1 665	1 606	1 468
Horses		370	344	341
Cattle		1 065	1 014	918
Hogs		138	159	118
Sheep		8	14	---
Poultry		84	75	91
Machinery and equipment		1 579	1 864	1 603
Feed and grains		1 396	1 620	1 481
Total capital investment	$	$28 926	$26 593	$31 316
RECEIPTS AND NET INCREASES				
Livestock total		1 993	2 217	1 591
Horses		16	13	29
Cattle		328	515	297
Hogs (including AAA payments)		350	457	338
Sheep		33	88	--
Poultry		59	63	40
Egg sales		133	130	125
Dairy sales		1 074	951	762
Feed and grains (including AAA payments)		586	1 108	359
Labor off farm		54	78	27
Miscellaneous receipts		7	13	2
Total receipts & net increases	$	$ 2 640	$ 3 416	$ 1 979
EXPENSES AND NET DECREASES				
Farm improvements		232	182	326
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		400	421	500
Feed and grains		---	---	---
Livestock expense		31	26	15
Crop expense		149	134	158
Hired labor		159	171	164
Taxes		195	182	233
Miscellaneous expenses		32	30	33
Total expenses & net decreases	$	$ 1 198	$ 1 146	$ 1 429
RECEIPTS LESS EXPENSES	$	$ 1 442	$ 2 270	$ 550
Total unpaid labor		690	652	757
Operator's labor		513	540	540
Family labor		177	112	217
Net income from investment and management		752	1 613	-207
RATE EARNED ON INVESTMENT	%	2.60%	6.08%	-.66%
Return to capital and operator's labor and management		1 265	2 158	333
5% of capital invested		1 446	1 330	1 566
LABOR AND MANAGEMENT WAGE	$	$ -181	$ 828	$-1 233

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$13.	1	$3.	6
11.	1	1.	3
9.	7	-1.	4
7.	7	-3 and under. . .	4
5.	2		

A further study of the farm businesses, made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 188 acres each, the least successful 219. Chiefly because of their smaller investments in land and improvements, the most successful group had smaller total investments than either the least successful group, or the average of all accounting farms. However, in spite of their smaller size, the most successful group received over three times as much income from feed and grain as the least successful group. This difference was one of the two chief factors accounting for the difference in total income between the two groups, the other factor being the higher income from livestock and livestock products. The most successful group also had less total expense per farm, and per acre, including the charge for family labor, than either the least successful or the average of all accounting farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	1 310	425
Average of 12 most successful farms . .	1 424	311
Average of 12 least successful farms. .	1 475	620
Your farm		

The least profitable farms had more bushels of corn inventoried at the beginning, and at the end of the year, however, the total value of all feed and grain on the most profitable farms was inventoried at $139 more at the beginning of the year, and $279 more at the end of the year, than on the least profitable farms. These larger inventories of feeds and grains other than corn may be explained by the larger acreage of hay and feed crops on the most profitable farms.

For the accounting farms in Will County there was an average inventory decrease of $121 per farm in 1934, as compared with average inventory decreases of $59 per farm in 1933 and $895 per farm in 1932. The inventory of total livestock showed an increase of $9, while feed and grains increased $81. The machinery inventory decreased $92, and farm improvements decreased $119. Many individual farms showed an increase in the machinery inventory due to the value of new replacements during the year exceeding depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 665	$1 674	$ 9	$
Feed and grains	1 396	1 477	81	
Machinery	1 579	1 487	-92	
Improvements (except residence	4 924	4 805	-119	
Total	$9 564	$9 443	$-121	$

Some Adjustments on Will County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 9 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,698 a farm in 1934, as compared with $1,527 in 1933. This increase in cash operating expense of $371 in 1934 can be attributed very largely to the increase in cash expenditures for feed and grain, and for machinery and supplies for machinery. The increase in expense for feed and grain may be attributed to the drouth, but, because of postponement of needed machinery replacements during the four years beginning with 1929, an even greater expansion of spending for machinery may be expected as soon as incomes will permit.

Cash Income and Expenses on Accounting Farms in Will County 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 266	$ 824	$	$2 250	$4 577
Feed and grains		369	406		874	1 887
Machinery		383	728		75	83
Improvements		114	378		1	2
Labor		159	419		54	38
Miscellaneous		32	40		7	9
Livestock expense		31	54		--	--
Crop expense		149	203		--	--
Taxes		195	320		--	--
Total	$	$1 698	$3 372	$	$3 261	$6 596
Excess of cash sales over expenses				$	$1 563	$3 224
Increase in inventory					-121	-188
Income to labor and capital (Receipts less expenses)					1 442	3 036

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average accounting farm in Will County spent 51 percent of the cash income as operating expenses in 1929, while in 1934 the average accounting farm spent 52 percent. The relationship, therefore, between cash income and expenses for the two years is the same, but the 1934 cash income and expenses are only 50 percent as large as 1929. There was, however, considerable difference in the distribution of the expense items. In 1934 the livestock purchases were 32 percent, and feed and grain purchases 91 percent as large as in 1929. In 1934 these farms paid 53 percent as much for machinery, and 73 percent as much for crop expense as in 1929, while taxes were reduced to only 61 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $8.59, as compared with $-.95 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

Although smaller and having less total investments, the most profitable farms had larger investments in both livestock and feed and grains on which to make a profit when prices advanced. The higher yields of the principal grains more than offset the smaller acreages of these crops on the most profitable farms, while the larger acreage of legumes and other feed crops, the yields of which were not so severely affected by the drouth, was a significant factor in accounting for much larger increases in feeds other than grains on the most profitable farms.

The most profitable group had more livestock and fed more feed, both per acre and total, than the least profitable group. The returns per acre from productive livestock were $11.70 for the most profitable group and $7.14 for the least profitable group. Income per litter was $27 higher, and dairy sales per cow $14 higher, on the most profitable farms. Returns for each $100 of feed fed to livestock were $135 as compared with $118 for the least profitable group.

An interesting and unusual situation is presented by the fact that returns for each $100 of feed fed were $140 for the average of all accounting farms. This is $5 higher than for the most profitable third. The middle group, data for which are not shown in the table, averaged $160 returns from cattle receipts and increases, and $1,550 returns from dairy sales, while the averages for these two items for the most profitable group were $515 and $951 respectively. The $172 return to farms in the middle group for each $100 of feed fed was sufficient to raise the average of all accounting farms for this factor to $140, or $5 more than the most profitable group. However, returns for each $100 invested in cattle, including both cattle receipts and increases and dairy sales were $154 for the most profitable group as compared with $136 for the middle group. The comparable figure for the average of all accounting farms was $136.

The larger income on the most profitable farms was secured with a total operating cost of $9.54 per acre, as compared with $10.00 per acre for the least profitable farms. The man labor costs per $100 gross income were $22 on the most profitable farms, as compared with $40 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	12	$108	5	$290	9	$106	$309
1/3 least profitable farms	7	147	3	444	6	57	226
All accounting farms	29	114	12	265	20	84	233

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $38 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 20 contracted acres which were used as follows: 4.9 idle; 1.9 red clover; 8.7 soybeans; 2.1 alfalfa; and 2.4 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, for most of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were, on many farms, the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
35 Will County Farms in 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
Size of farms--acres	____	195.1	188.4	218.7
Percent of land area tillable	____	87.0	90.0	84.2
Percent of tillable land in hay and pasture	____	35.9	40.5	28.1
Gross receipts per acre	____	13.53	18.13	9.05
Total expenses per acre	____	9.68	9.54	10.00
Net receipts per acre	____	3.85	8.59	-.95
Value of land per acre	____	99	93	98
Total investment per acre	____	148	141	143
Acres in Corn	____	51.1	48.4	54.6
Oats	____	36.1	33.3	45.3
Wheat	____	5.6	5.5	9.4
Soybeans	____	6.4	8.7	8.3
Hay	____	39.2	43.8	34.0
Tillable pasture	____	21.7	25.2	17.8
Crop yields--Corn, bu. per acre	____	12.7	14.2	12.3
Oats, bu. per acre	____	15.1	21.9	11.5
Soybeans, bu. per acre	____	19.2	23.7	15.8
Value of feed fed to productive L.S.	____	1 410	1 628	1 324
Returns per $100 of feed fed to productive livestock	____	140	135	118
Returns per $100 invested in:				
Cattle	____	139	154	126
Poultry	____	234	254	206
Pigs weaned per litter	____	5.6	5.0	5.7
Income per litter farrowed	____	85	99	72
Dairy sales per dairy cow	____	99	97	83
Investment in productive L.S. per A.	____	6.60	7.03	4.76
Receipts from productive L.S. per A.	____	10.13	11.70	7.14
Man labor cost per crop acre	____	5.37	5.37	5.36
Machinery cost per crop acre	____	2.70	2.90	3.00
Power and mach. cost per crop A.	____	4.18	4.52	3.92
Farms with tractor	____	71%	92%	33%
Value of feed fed to horses	____	235	247	183
Man labor cost per $100 gross income	____	28	22	40
Expenses per $100 gross income	____	66	50	96
Farm improvements cost per acre	____	1.19	.97	1.49
Excess of sales over cash expenses	____	1 563	2 096	1 040
Increase in inventory	____	-121	174	-490
Rate earned on investment	____	2.60%	6.08%	-.66%
Gross receipts per farm	____	2 640	3 416	1 979

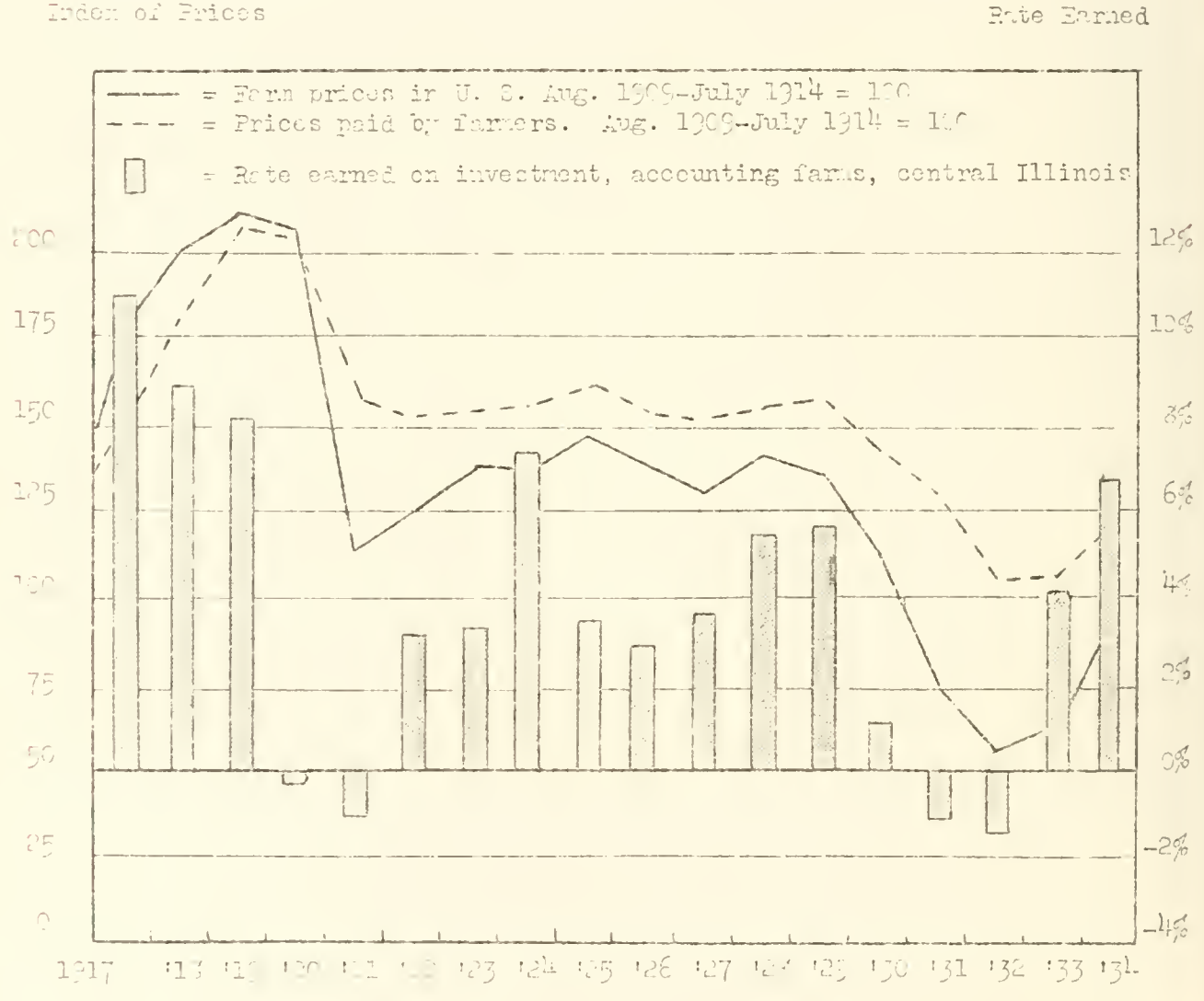
Chart for Studying the Efficiency of Various Parts of Your Business,
Will County, 1934

The numbers above the lines across the middle of the page are the averages for the 35 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Soybeans					Labor	Power and machinery				Per acre	Per farm	
9.10	34	42	29	110	149	334	240	1.37	1.18	--	1920	3100	24	5100	440
7.80	30	38	27	105	139	314	220	2.57	1.78	4	1520	2800	22	4600	390
6.50	26	34	25	100	129	294	200	3.27	2.38	10	1120	2500	20	4100	340
5.20	22	30	23	95	119	274	180	3.97	2.98	16	720	2200	18	3600	290
3.90	18	26	21	90	109	254	160	4.67	3.58	22	320	1900	16	3100	240
2.60	14.2	21.9	19.2	85	99	234	140	5.37	4.18	28	-121	1563	13.53	2640	195
1.30	10	18	17	80	89	214	120	6.07	4.78	34	-520	1300	12	2100	140
0	6	14	15	75	79	194	100	6.77	5.38	40	-920	1000	10	1600	90
-1.30	2	10	13	70	69	174	80	7.47	5.98	46	-1320	7000	8	1100	40
-2.60	---	6	11	65	59	154	60	8.17	6.58	52	-1720	4000	6	600	--
-3.90	---	2	9	60	49	134	40	8.87	7.18	58	-2120	1000	4	100	--

Influence of Price Changes on Farm Earnings

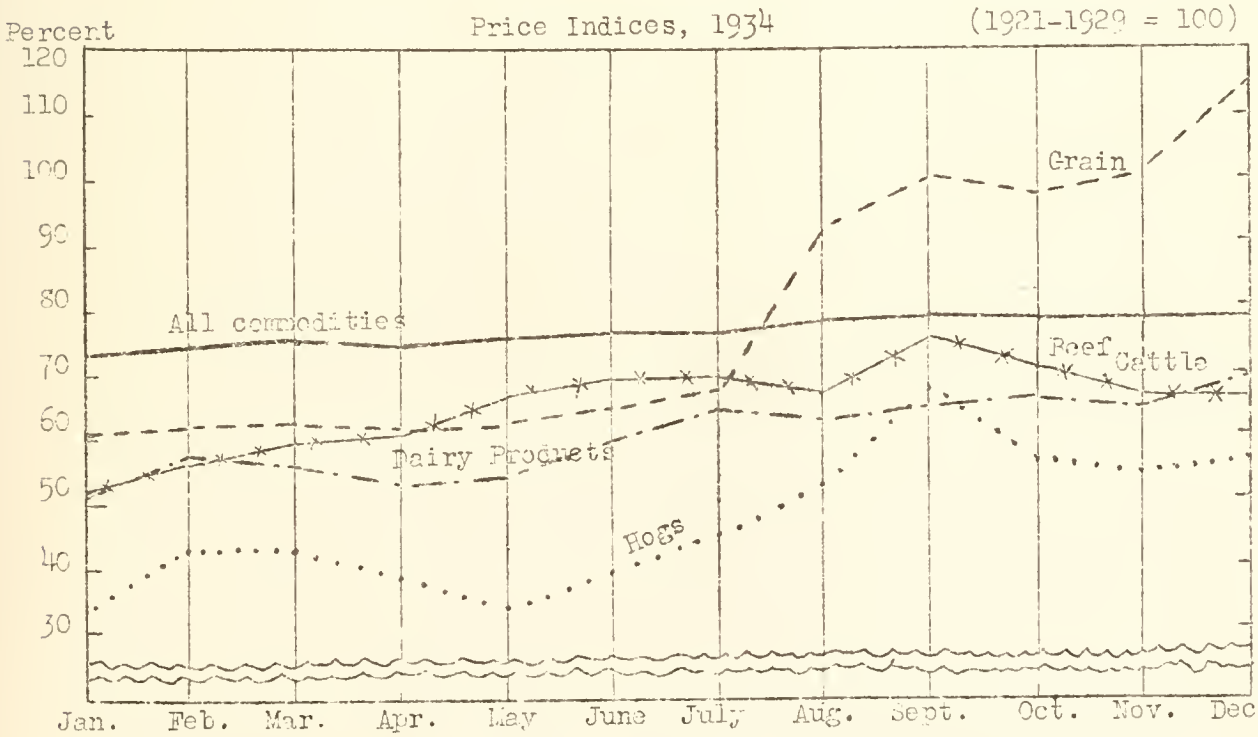
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Will County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last three, and were 54 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1929.

Earnings in 1935 as usual will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Will County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	31	30	30	30	35
Average size of farms, acres	205	200	214	191	195
Average rate earned, to pay for management, risk and capital	1.5%	-1.7%	-.7%	2.4%	2.6%
Average labor and management wage	$-747	$-1 821	$-1 391	$-206	$-181
Gross income per acre	16.74	9.57	9.18	13.21	13.53
Operating cost per acre	13.47	12.67	10.23	9.59	9.68
Average value of land per acre	147	119	101	102	99
Total investment per acre	211	179	158	151	148
Investment per farm in:					
Total livestock	2 824	2 809	2 440	1 728	1 665
Cattle	1 732	1 774	1 649	1 055	1 065
Hogs	473	474	250	181	158
Poultry	170	149	110	106	84
Gross income per farm	3 436	1 913	1 968	2 523	2 640
Income per farm from:					
Crops	564	---	---	852	586
Miscellaneous income	25	30	49	59	7
Total livestock	2 847	1 883	1 919	1 612	1 993
Cattle	340	---	451	315	328
Dairy sales	1 373	1 232	950	847	1 074
Hogs	829	346	320	297	350
Poultry	305	250	189	147	59
Average yield of corn in bu.	30	36	47	24	13
Average yield of oats in bu.	45	29	50	22	15

ANNUAL FARM BUSINESS REPORT ON FIFTY-FOUR FARMS IN BOONE, WINNEBAGO, AND McHENRY COUNTIES, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and J. Ackerman*

The farm earnings of 54 account-keeping farmers in Boone, Winnebago, and McHenry Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 54 accounts show for 1934 an average net income of $1,337 per farm, as compared with an average of $937 in 1933, and an average net loss of $213 in 1932. The average cash income in 1934 was $4,125 per farm, the cash business expenditures $2,512 per farm, leaving a cash balance of $1,613 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income there was an inventory increase of $372 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,985 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others and was much worse on some farms than other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* Edward C. Foley, C. H. Keltner, and W. A. Herrington, farm advisers in Boone, Winnebago, and McHenry Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand, the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 54 accounting farms the most successful third shows an average net income of $2,629, while the average net income of the least successful third of the farms was only $174. In 1933 the most successful third showed a net income of $2,148, while the least successful third showed a net loss of $26.

Investments, Receipts, Expenses and Earnings on
Boone, Winnebago and McHenry County Farms in 1934

Items	Your farm	Average of 54 farms	18 most profitable farms	18 least profitable farms
APITAL INVESTMENTS				
Land		15 088	16 666	13 724
Farm improvements		6 430	6 270	5 825
Livestock total	_____	2 632	2 571	2 345
Horses		397	415	429
Cattle		1 797	1 687	1 549
Hogs		273	298	241
Sheep		71	63	48
Poultry		94	108	78
Machinery and equipment		1 555	1 584	1 238
Feed and grains		1 538	1 700	1 266
Total capital investment	$_____	$27 243	$28 791	$24 398
ECEIPTS AND NET INCREASES				
Livestock total	_____	3 387	3 867	2 635
Horses		12	11	25
Cattle		561	551	389
Hogs (including AAA payments)		695	855	496
Sheep		173	331	62
Poultry		70	101	34
Egg sales		150	186	96
Dairy sales		1 726	1 832	1 533
Feed and grains (including AAA payments)		---	730	---
Labor off farm		63	82	35
Miscellaneous receipts		9	18	---
Total receipts & net increases	$_____	$ 3 459	$ 4 697	$ 2 670
XPENSES AND NET DECREASES				
Farm improvements		265	240	272
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		393	369	348
Feed and grains		54	---	514
Livestock expense		49	51	42
Crop expense		155	165	150
Hired labor		294	321	241
Taxes		231	234	216
Miscellaneous expenses		33	34	24
Total expenses & net decreases	$_____	$ 1 474	$ 1 414	$ 1 807
ECEIPTS LESS EXPENSES	$_____	$ 1 985	$ 3 283	$ 863
otal unpaid labor		648	654	689
Operator's labor		509	533	495
Family labor		139	121	194
et income from investment and management		1 337	2 629	174
ATE EARNED ON INVESTMENT	_____%	4.91%	9.14%	.71%
eturn to capital and operator's labor and management		1 846	3 162	669
% of capital invested		1 362	1 440	1 220
ABOR AND MANAGEMENT WAGE	$_____	$ 484	$ 1 722	$ - 551

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$23	1	$ 9	1
21	0	7	10
19	0	5	10
17	1	3	10
15	2	1	5
13	3	-1	4
11	6	-3	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net income, with those having the lowest income will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms averaged 227.0 acres each, the least profitable 183.5 acrs. This difference in size accounts in part for the variation in the average investments and receipts in the two groups. Difference in the receipts from the sale of livestock, livestock products, and grains accounts for most of the difference in income between the two groups. The most profitable farms had less total expense per farm and per acre, including the charge for family labor, than the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	1 105	534
Average of 18 most successful farms	1 406	896
Average of 18 least successful farms	845	220
Your farm		

The most profitable farms had a larger inventory of corn, both at the beginning and at the end of the year than either the average of all farms, or the least profitable farms. This difference, with the rapid rise in corn prices, was an important factor in accounting for a considerable part of their higher receipts and net increases from feed and grain.

The average inventory increase for the accounting farms in Boone, Winnebago, and McHenry counties was $372 per farm in 1934, as compared with $135 in 1933, and an inventory loss of $1,305 per farm in 1932. There were increases of $260 in feed and grains, $209 in total livestock, and $27 in machinery, while improvements showed a decrease of $124 per farm. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 632	$2 841	$209	$
Feed and grains	1 538	1 798	260	
Machinery	1 555	1 582	27	
Improvements (except residence)	6 430	6 306	-124	
Total	$12 155	$12 527	$372	$

Some Adjustments on Boone, Winnebago, and McHenry County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. Total operating expenses were $10.05 per acre in 1934, as compared with $10.17 per acre in 1933, while cash operating expenses were $2,512 per farm in 1934, as compared with $2,074 per farm in 1933. This increase in cash operating expense of $438 in 1934 can be attributed very largely to the increase in cash expenditure for feed and grain, due to the low crop yields, and the increase in expenditures for machinery, labor and crop expense. The expenditures for livestock and taxes were less in 1934 than 1933. If farm incomes continue to increase, indications point to an expansion of spending in 1935, particularly for machinery and improvements, since farmers have postponed replacements and repairs of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Boone, Winnebago, and McHenry Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 474	$ 870	$	$3 652	$6 068
Feed and grains		613	671		299	317
Machinery		518	822		98	114
Improvements		145	267		4	2
Labor		294	440		63	30
Miscellaneous		33	34		9	26
Livestock expense		49	98		---	---
Crop expense		155	196		---	---
Taxes		231	278		---	---
Total	$	$2 512	$3 676	$	$4 125	$6 557
Excess of cash sales over expenses				$	$1 613	$2 881
Increase in inventory					372	277
Income to labor and capital (Receipts less expenses)					1 985	3 158

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. While the average cash income in 1934 was only 63 percent of that in 1929, cash expenditures were 68 percent as large. In 1934, livestock purchases were 54 percent and feed and grain purchases 91 percent as large as in 1929. In 1934 these farms paid out 63 percent as much for machinery, 54 percent as much for improvements, and 79 percent as much for crop expense as in 1929, while taxes were reduced to 83 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $11.58 as compared with $0.95 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were more intensive and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $10.73 per acre, and fed $2,565 of feed per farm, as compared with $10.54 invested an acre, and $2,131 of feed fed per farm on the least profitable farms. The returns per $100 of feed fed to productive livestock was $150 on the most profitable farms, as compared with $122 on the least profitable farms. The dairy sales per dairy cow were $105 on the most profitable farms, as compared with $93 on the least profitable farms. The most profitable farms had an income of $89 per litter farrowed, as compared with an income of $78 per litter farrowed on the least profitable farms.

The most profitable farms averaged 43.5 acres larger, and had 21.2 acres more corn, 4.4 acres more oats, 6 acres more hay, and 7 acres more tillable pasture than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. In addition to the larger acreage of crops, another reason for the larger inventories of feed and grain was the higher crop yields, the most profitable farms having an advantage of 10.6 bushels of corn and 1.7 bushels of oats per acre.

Higher total operating expense on the least profitable farms, was an important factor in accounting for the reduced net earnings of this group. The man labor costs were $6.27 per crop acre on the most profitable farms, as compared with $7.94 per crop acre on the least profitable farms, while power and machinery costs per crop acre amounted to $4.34 on the most profitable farms and $5.04 on the least profitable farms.

The Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	13	$116	2	$36	12	$136	$178
1/3 least profitable farms	15	79	--	--	14	117	157
All accounting farms	44	90	5	32	40	132	174

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 75 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 9.6 contracted acres which were used as follows: 2.7 idle; 0.6 mixed red clover and timothy; 0.2 sweet clover; 2.1 soybeans; 1.0 alfalfa; and 3.0 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
Boone, Winnebago and McHenry County Farms in 1934

Items	Your farm	Average of 54 farms	18 most profitable farms	18 least profitable farms
Size of farms--acres		211.0	227.0	183.5
Percent of land area tillable		79.8	83.3	79.5
Percent of tillable land in hay and pasture		42.4	41.0	44.2
Gross receipts per acre		16.39	20.69	14.55
Total expenses per acre		10.05	9.11	13.60
Net receipts per acre		6.34	11.58	.95
Value of land per acre		72	73	75
Total investment per acre		129	127	133
Acres in Corn		28.6	40.4	19.2
Oats		21.0	23.0	18.6
Wheat		2.9	1.6	2.9
Barley		14.6	20.6	8.9
Hay		34.5	37.4	31.4
Tillable pasture		36.9	40.0	33.0
Crop yields--Corn, bu. per acre		28.1	32.0	21.4
Oats, bu. per acre		15.2	15.5	13.8
Barley, bu. per acre		8.8	8.3	8.9
Value of feed fed to productive L.S.		2 444	2 565	2 131
Returns per $100 of feed fed to productive livestock		138	150	122
Returns per $100 invested in:				
Cattle		129	140	124
Poultry		220	247	165
Pigs weaned per litter		5.8	5.4	6.2
Income per litter farrowed		85	89	78
Dairy sales per dairy cow		100	105	93
Investment in productive L.S. per A.		11.02	10.73	10.54
Receipts from productive L.S. per A.		16.00	16.99	14.22
Man labor cost per crop acre		6.93	6.27	7.94
Machinery cost per crop acre		3.00	2.48	3.09
Power and mach. cost per crop A.		4.94	4.34	5.04
Farms with tractor		81%	83%	78%
Value of feed fed to horses		268	288	246
Man labor cost per $100 gross income		26	20	34
Expenses per $100 gross income		61	44	93
Farm improvements cost per acre		1.26	1.06	1.48
Excess of sales over cash expenses		1 613	1 973	1 024
Increase in inventory		372	1 310	-161
Rate earned on investment		4.91%	9.14%	.71
Gross receipts per farm		3 459	4 697	2 670

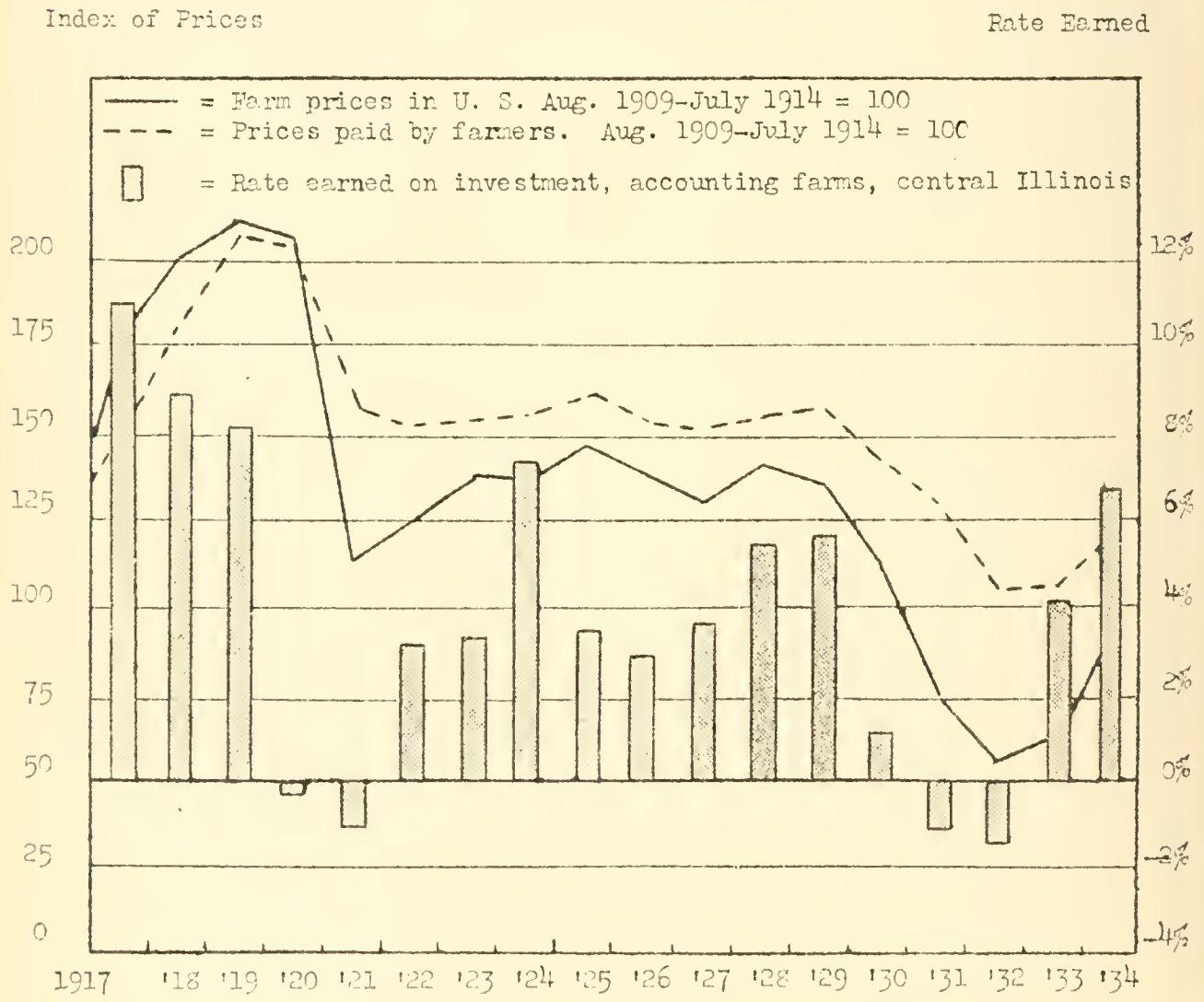
Chart for Studying the Efficiency of Various Parts of Your Business,
Boone, Winnebago and McHenry Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 54 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Barley	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
12.4	53	40	19	185	200	420	238	--	--	--	3872	4600	36	6459	361
10.9	48	35	17	165	180	380	218	.13	.14	6	3172	4000	32	5859	331
9.4	43	30	15	145	160	340	198	1.83	1.34	11	2472	3400	28	5259	301
7.9	38	25	13	125	140	300	178	3.53	2.54	16	1772	2800	24	4659	271
6.4	33	20	11	105	120	260	158	5.23	3.74	21	1072	2200	20	4059	241
4.91	28.1	15.2	8.8	85	100	220	138	6.93	4.94	26	372	1613	16.39	3459	211
3.4	23	10	7	65	80	180	118	8.63	6.14	31	-328	1000	12	2859	181
1.9	18	5	5	45	60	140	98	10.33	7.34	36	-1028	400	8	2259	151
.4	13	0	3	25	40	100	78	12.03	8.54	41	-1728	-200	4	1659	121
-1.5	8	--	1	5	20	60	58	13.73	9.74	46	-2428	--	--	1059	91
-3.0	3	--	0	--	--	20	38	15.43	10.94	51	--	--	--	459	61

Influence of Price Changes on Farm Earnings

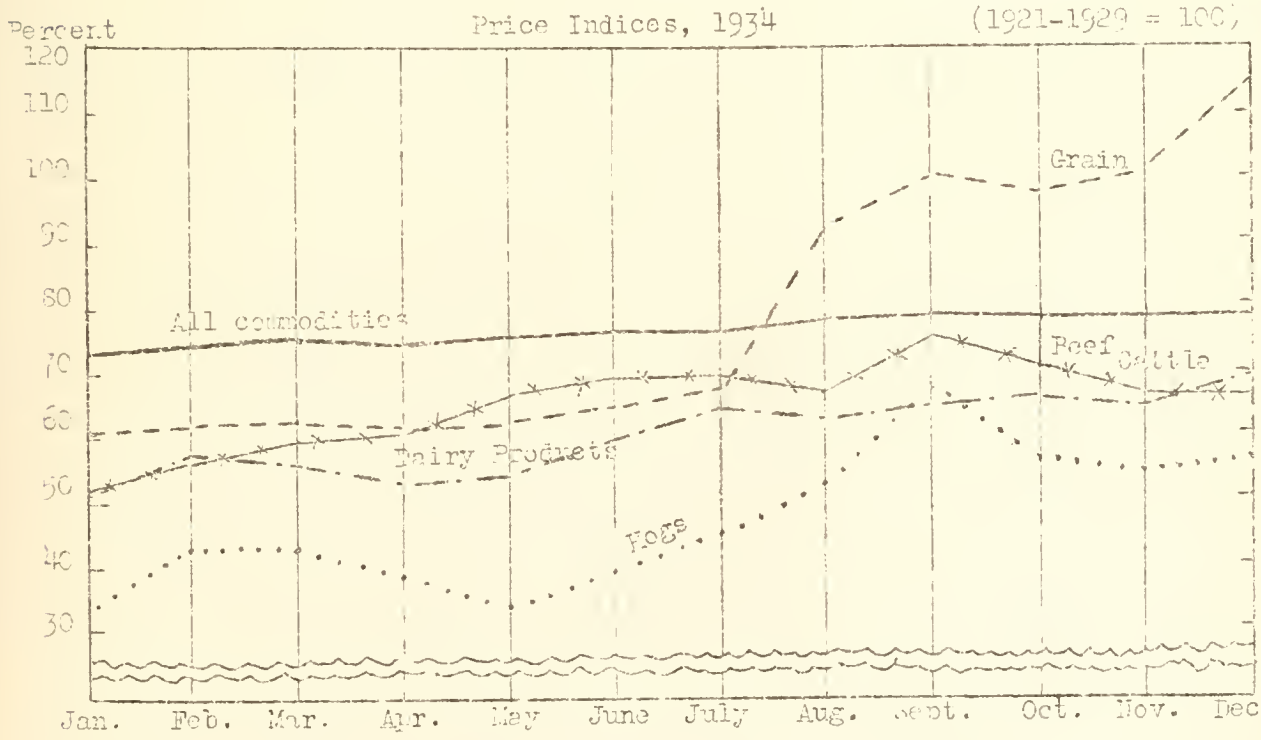
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Boone, Winnebago, and McHenry Counties for the last five years is very interesting because of the violent changes in price level. Crop yields in 1934 were low, yet total receipts per farm were higher than in any other year since 1930, and were 63 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the last five. Thus profits were the best these counties have experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Boone, Winnebago, and McHenry Counties for 1930-1934

Items	1930 1/	1931 1/	1932 2/	1933 2/	1934
Number of farms	31	30	37	37	54
Average size of farms, acres	206	203	193	208	211
Average rate earned, to pay for management, risk and capital	4.6%	-.8%	-.8%	3.5%	4.9%
Average labor and management wage	$ 571	$-1 349	$-1 095	$113	$484
Gross income per acre	22.01	15.16	14.25	14.68	16.39
Operating cost per acre	14.01	16.49	15.35	10.17	10.05
Average value of land per acre	99	87	77	72	72
Total investment per acre	173	161	143	129	129
Investment per farm in:					
Total livestock	4 583	4 000	3 209	2 609	2 632
Cattle	3 059	2 611	2 258	1 672	1 797
Hogs	727	605	261	305	273
Poultry	159	138	126	101	94
Gross income per farm	4 537	3 078	2 755	3 051	3 459
Income per farm from:					
Crops	548	---	---	604	---
Miscellaneous income	42	28	50	35	9
Total livestock	3 947	3 050	2 705	2 412	3 387
Cattle	313	---	9	290	561
Dairy sales	2 231	2 022	2 042	1 226	1 726
Hogs	965	667	329	570	695
Poultry and eggs	316	295	236	222	70
Average yield of corn in bu.	45	44	43	45	28
Average yield of oats in bu.	50	32	44	25	15

1/ Records from Boone County only for 1930 and 1931.
2/ Records from Boone and Winnebago Counties only for 1932 and 1933.

ANNUAL FARM BUSINESS REPORT ON FORTY-TWO FARMS IN KENDALL, DUPAGE, LAKE, COOK, AND KANE COUNTIES, ILLINOIS, 1934

P. E. Johnston, A. L. Leonard, and J. Ackerman*

The farm earnings of 42 account-keeping farmers in this area showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 42 accounts show for 1934 an average net income of $1,192 per farm, as compared with an average of $988 in 1933, and an average of $3 in 1932. The average cash income in 1934 was $3,935 per farm, the cash business expenditures $2,297 per farm, leaving a cash balance of $1,638 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $338 a farm due in large part to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,976 a farm. The inventory increase was larger in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*W. P. Miller, H. S. Wright, H. C. Gilkerson, O. G. Barett and H. P. Kelly, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 42 accounting farms, the most successful third shows an average net income of $3,013, while the average net loss of the least successful third of the farms was $255. In 1933 the comparable figures for the two groups are a net income of $2,086, and a net loss of $178, respectively.

Investments, Receipts, Expenses and Earnings on 42
Kendall, DuPage, Lake, Cook and Kane County Farms in 1934

Items	Your farm	Average of 42 farms	14 most profitable farms	14 least profitable farms
CAPITAL INVESTMENTS				
Land		22 090	29 594	15 894
Farm improvements		5 821	6 220	5 264
Livestock total		2 366	3 116	1 806
Horses		455	563	355
Cattle		1 414	1 825	988
Hogs		289	414	236
Sheep		104	210	89
Poultry		104	104	138
Machinery and equipment		1 818	2 346	1 621
Feed and grains		1 524	2 035	924
Total capital investment	$	$33 619	$43 311	$25 509
RECEIPTS AND NET INCREASES				
Livestock total		2 869	3 935	2 055
Horses		---	---	---
Cattle		457	782	211
Hogs (including AAA payments)		839	1 335	603
Sheep		91	200	55
Poultry		50	81	36
Egg sales		176	197	198
Dairy sales		1 256	1 340	952
Feed and grains (including AAA payments)		444	1 659	---
Labor off farm		69	128	43
Miscellaneous receipts		1	2	1
Total receipts & net increases	$	$ 3 383	$ 5 724	$ 2 099
EXPENSES AND NET DECREASES				
Farm improvements		261	283	257
Horses		9	36	9
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		416	556	311
Feed and grains		---	---	527
Livestock expense		55	75	37
Crop expense		156	191	116
Hired labor		167	266	113
Taxes		313	429	196
Miscellaneous expenses		30	26	30
Total expenses & net decreases	$	$ 1 407	$ 1 862	$ 1 596
RECEIPTS LESS EXPENSES	$	$ 1 976	$ 3 862	$ 503
Total unpaid labor		734	849	758
Operator's labor		533	540	520
Family labor		251	309	238
Net income from investment and management		1 192	3 013	-255
RATE EARNED ON INVESTMENT	%	3.54%	6.96%	-1.00%
Return to capital and operator's labor and management		1 725	3 553	265
5% of capital invested		1 681	2 166	1 275
LABOR AND MANAGEMENT WAGE	$	$ 44	$ 1 387	$-1 010

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$13 and over	5	$ 1	11
11	3	-1	2
9	5	-3	2
7	6	-5	0
5	3	-7	2
3	2	-9	1

A further study of the farm businesses, made by comparing the investment, receipts, and expenses of the group of farms having the highest net income with those having the lowest income, will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 299 acres each, the least successful 137 acres. This difference in size accounts in part for the variation in the average investments, receipts, and expenses in the two groups. Difference in receipts from the sale of feed and grains, hogs, cattle, and dairy products accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Grain Inventoried

	Corn		Oats	
	Jan. 1, '34	Dec. 31, '34	Jan. 1, '34	Dec. 31, '34
Average of all farms	1 371	837	596	403
Average of 14 high farms	1 808	1 564	821	638
Average of 14 low farms	561	211	392	199
Your farm				

For the accounting farms in Kendall, DuPage, Lake, Cook, and Kane Counties there was an average inventory increase of $338 per farm in 1934, as compared with $147 in 1933, and a decrease of $1,073 per farm in 1932. There were increases of $389 in feed and grain and $112 in livestock, and decreases of $137 in improvements, and $26 in machinery. The inventory decrease in machinery was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made, but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 366	$2 478	$112	$
Feed and grains	1 524	1 913	389	
Machinery	1 818	1 792	-26	
Improvements (except residence)	5 821	5 684	-137	
Total	$11 529	$11 867	$338	$

Some Adjustments on Kendall, DuPage, Lake, Cook and Kane County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1929 through 1934 farm operating costs declined each year. The total operating expenses were 75 cents an acre lower in 1934 than in 1933, while cash operating expenses were $2,297 a farm in 1934, as compared with $2,065 a farm in 1933. Low crop yields, combined with the usual large amount of livestock on the farms included in this study, necessitated the purchase of considerable more feed in 1934 than in 1933. Indications point to an increase of expenditure for machinery and improvements in 1935, since farmers have postponed repairs and replacements for these items during the four-year period since 1930.

Cash Income and Expenses on Accounting Farms in Kendall, DuPage, Lake, Cook and Kane Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 418	$1 160	$	$3 166	$5 878
Feed and grains		578	745		633	719
Machinery		448	787		58	127
Improvements		132	236		8	2
Labor		167	517		69	58
Miscellaneous		30	39		1	4
Livestock expense		55	100		---	---
Crop expense		156	220		---	---
Taxes		313	318		---	---
Total	$	$2 297	$4 122	$	$3 935	$6 788
Excess of cash sales over expenses				$	$1 638	$2 666
Increase in inventory					338	529
Income to labor and capital (Receipts less expenses)					1 976	3 195

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average accounting farm in this area spent 61 percent of the cash income as operating expenses in 1929, while in 1934 the average accounting farm spent 58 percent. The relationship, therefore, between cash income and expenses for the two years is practically the same, but the 1934 cash income was only 58 percent as large as in 1929. There was, however, considerable difference in the distribution of the expense items. In 1934 the livestock purchases were 36 percent, and feed and grain purchases 78 percent as large as in 1929. In 1934 these farms paid 57 percent as much for machinery, 56 percent as much for improvements, and 71 percent as much for crop expense as in 1929, while taxes were 98 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $10.07, as compared with a net loss of $1.85 per acre for the least profitable group. The reasosn for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable averaged 161.9 acres larger, had 47.7 acres more corn, 22.4 acres more oats, 18.2 acres more hay and 16.1 acres more tillable pasture than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. In addition to the larger acreage, another reason for the larger inventories was the higher crop yields, the most profitable farms having an advantage of 5.6 bushels of corn, and 6.1 bushels of oats per acre. Crop yields were so low on the least profitable farms that they had an average inventory loss of $447 per farm in spite of the price advance.

The most profitable farms had more livestock per farm, and were more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $9.51 per acre, and fed $2,567 of feed per farm. The comparable figures for the least profitable farms were $10.11 invested per acre, and $1,640 of feed fed per farm. The most profitable farms secured a return of $153 for each $100 worth of feed fed, as compared with a return of $125 for each $100 worth of feed fed on the least profitable farms. The most profitable farms had an income of $99 per litter farrowed, as compared with an income of $81 per litter farrowed on the least profitable farms. Although the most profitable farms had 15.2 dairy cows per farm, as compared with 8.8 dairy cows on the least profitable farms, the dairy sales per dairy cow were only $88 on the most profitable farms, as compared with $103 on the least profitable group.

The larger income on the most profitable farms was secured with a total operating cost of $9.05 per acre, as compared with $17.13 per acre for the least profitable farms. The man labor costs were $4.18 per crop acre lower, and power and machinery costs were $1.30 per crop acre lower for the most successful farms.

Influences of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	10	$199	1	$54	9	$205	$278
1/3 least profitable farms	11	73	3	58	9	138	159
All accounting farms	33	131	6	57	28	155	215

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were sufficient to pay 69 percent of the taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 17.6 contracted acres which were used as follows: 7.0 idle; 1.2 mixed red clover and timothy; 2.3 sweet clover; 2.0 soybeans; 0.8 alfalfa; and 4.3 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were, on many farms, the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 42
Kendall, DuPage, Lake, Cook and Kane County Farms in 1934

Items	Your farm	Average of 42 farms	14 most profitable farms	14 least profitable farms
Size of farms--acres		206.6	299.3	137.4
Percent of land area tillable		85.9	85.8	80.9
Percent of tillable land in hay and pasture		35.5	31.3	41.4
Gross receipts per acre		16.37	19.12	15.28
Total expenses per acre		10.60	9.05	17.13
Net receipts per acre		5.77	10.07	-1.85
Value of land per acre		107	99	116
Total investment per acre		163	145	186
Acres in Corn		40.0	65.7	18.0
Oats		36.6	45.2	22.8
Wheat		4.7	7.6	4.7
Soybeans		2.8	6.1	1.2
Hay		34.1	46.3	28.1
Tillable pasture		28.9	34.0	17.9
Crop yields--Corn, bu. per acre		18.2	19.6	14.0
Oats, bu. per acre		12.2	15.2	9.1
Wheat, bu. per acre		3.4	6.3	0.6
Value of feed fed to productive L.S.		2 060	2 567	1 640
Returns per $100 of feed fed to productive livestock		139	153	125
Returns per $100 invested in:				
Cattle		121	113	125
Poultry		217	238	186
Pigs weaned per litter		5.7	6.2	5.4
Income per litter farrowed		88	99	81
Dairy sales per dairy cow		95	88	108
Investment in productive L.S. per A.		9.63	9.51	10.11
Receipts from productive L.S. per A.		13.89	13.15	14.96
Man labor cost per crop acre		6.16	4.70	8.88
Machinery cost per crop acre		2.80	2.49	3.34
Power and mach. cost per crop A.		4.53	4.06	5.36
Farms with tractor		83%	93%	71%
Value of feed fed to horses		248	312	180
Man labor cost per $100 gross income		27	18	39
Expenses per $100 gross income		65	47	112
Farm improvements cost per acre		1.26	.94	1.87
Excess of sales over cash expenses		1 638	2 281	950
Increase in inventory		338	1 581	-447
Rate earned on investment		3.54	6.96	-1.00
Gross receipts per farm		3 383	5 724	2 099

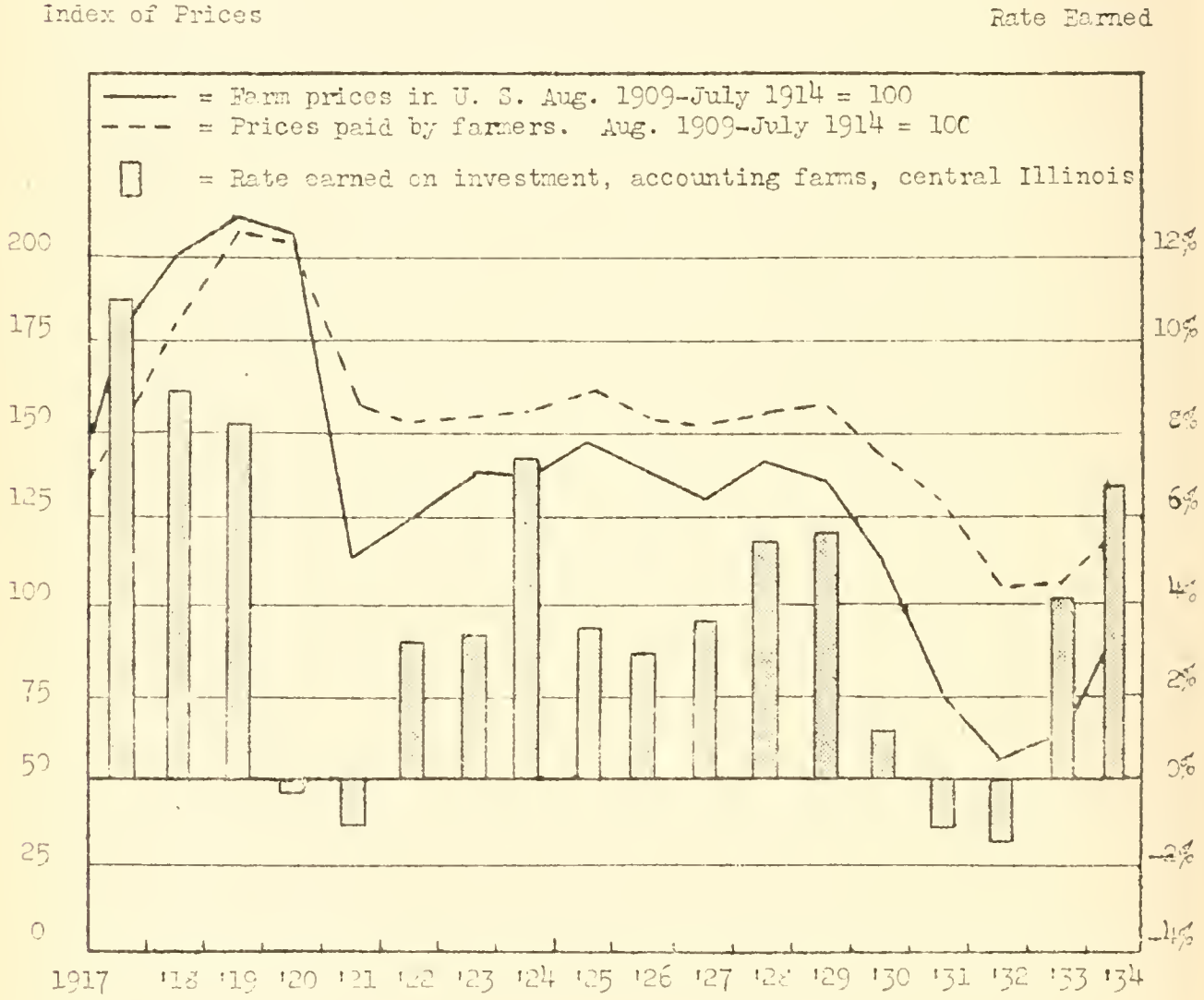
Chart for Studying the Efficiency of Various Parts of Your Business,
Kendall, DuPage, Lake, Cook and Kane Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 42 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre		Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats					Labor	Power and machinery				Per acre	Per farm	
3.5	33	32	138	195	467	214	--	--	2	4300	3600	36	8400	457
1.5	30	28	128	175	417	199	--	--	7	3500	3200	32	7400	407
9.5	27	24	118	155	367	184	.16	--	12	2700	2800	28	6400	357
7.5	24	20	108	135	317	169	2.16	1.33	17	1900	2400	24	5400	307
5.5	21	16	98	115	267	154	4.16	2.93	22	1100	2000	20	4400	257
3.54	18.2	12.2	88	95	217	139	6.16	4.53	27	338	1638	16.37	3383	206.6
1.5	15	8	78	75	167	124	8.16	6.13	32	-462	1200	12	2400	157
-.5	12	4	68	55	117	109	10.16	7.73	37	-1262	800	8	1400	107
2.5	9	0	58	35	67	94	12.16	9.33	42	-2062	400	4	400	57
4.5	6	--	48	15	17	79	14.16	10.93	47	-2862	0	0	--	7
6.5	3	--	38	--	--	64	16.16	12.53	52	--	--	--	--	--

Influence of Price Changes on Farm Earnings

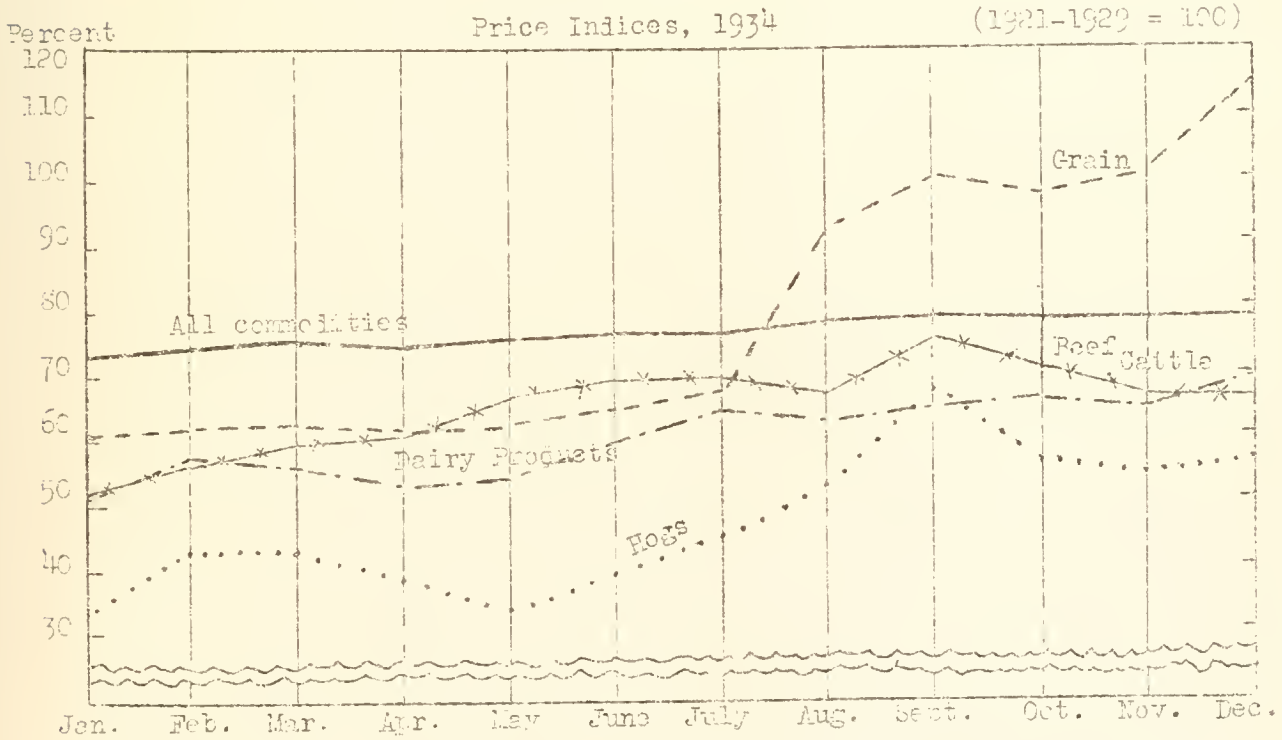
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in this area for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 64 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five. Thus profits were the best this area has experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Kendall, DuPage, Lake, Cook and Kane Counties for 1930-1934

Items	1930 1/	1931 2/	1932	1933 2/	1934
Number of farms	50	54	51	50	42
Average size of farms, acres	171	187	194	193	207
Average rate earned, to pay for management, risk and capital	2.7%	-.04%	.01%	3.3%	3.5%
Average labor and management wage	$-137	$-1 236	$-1 413	$ 6	$44
Gross income per acre	23.46	16.64	14.52	16.47	16.37
Operating cost per acre	17.40	16.71	14.50	11.35	10.60
Average value of land per acre	145	121	130	99	107
Total investment per acre	225	193	200	156	163
Investment per farm in:					
Total livestock	3 780	3 549	3 289	2 776	2 366
Cattle	2 586	2 514	2 332	1 962	1 414
Hogs	431	442	576	238	289
Poultry	198	164	137	119	104
Gross income per farm	4 004	3 106	2 821	3 179	3 383
Income per farm from:					
Crops	544	---	---	418	444
Miscellaneous income	77	38	85	39	1
Total livestock	3 383	3 068	2 736	2 722	2 860
Cattle	193	38	188	301	457
Dairy sales	2 155	2 216	1 954	1 771	1 256
Hogs	747	531	349	415	839
Poultry	276	276	235	204	50
Average yield of corn in bu.	37	43	50	35	18
Average yield of oats in bu.	51	41	46	26	12

1/ Records from DuPage, Cook, Kendall, and Kane Counties included for 1930.
2/ Records from McHenry, Kendall, DuPage, Lake, Cook, and Kane Counties included for 1931 and 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY FARMS IN CARROLL COUNTY, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and J. Ackerman*

The farm earnings of 30 account-keeping farmers in Carroll County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 30 accounts show for 1934 an average net income of $1,740 per farm, as compared with an average of $1,091 in 1933, and an average net loss of $526 in 1932. The average cash income in 1934 was $3,507 per farm, the cash business expenditures $1,682 per farm, leaving a cash balance of $1,825 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $681 a farm due mostly to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,506 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* M. P. Roske, farm adviser in Carroll County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms whih had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 30 accounting farms the most successful third shows an average net income of $2,949, while the average net income of the least successful third of the farms was only $372. In 1933 the comparable net incomes for the two groups was $1,977, and $70 respectively.

Investments, Receipts, Expenses and Earnings on 30 Carroll County Farms in 1934

Items	Your farm	Average of 30 farms	10 most profitable farms	10 least profitable farms
CAPITAL INVESTMENTS				
Land		$16 183	$16 632	$12 632
Farm improvements		4 168	4 930	3 351
Livestock total		1 770	1 961	1 324
Horses		349	341	332
Cattle		902	940	619
Hogs		383	557	238
Sheep		42	31	35
Poultry		94	92	100
Machinery and equipment		1 079	1 199	1 023
Feed and grains		1 377	1 495	1 253
Total capital investment	$	$24 577	$26 217	$19 583
RECEIPTS AND NET INCREASES				
Livestock total		$ 3 030	$ 3 938	$ 1 882
Horses		38	38	44
Cattle		831	1 150	471
Hogs (including AAA payments)		1 278	1 629	844
Sheep		52	55	27
Poultry		86	97	80
Egg sales		165	185	126
Dairy sales		580	784	290
Feed and grains (including AAA payments)		270	791	---
Labor off farm		57	28	41
Miscellaneous receipts		3	1	6
Total receipts & net increases	$	$ 3 360	$ 4 758	$ 1 929
EXPENSES AND NET DECREASES				
Farm improvements		$ 200	$ 188	$ 139
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		228	321	157
Feed and grains		---	---	257
Livestock expense		33	45	18
Crop expense		131	184	81
Hired labor		85	116	37
Taxes		154	174	116
Miscellaneous expenses		23	23	24
Total expenses & net decreases	$	$ 854	$ 1 051	$ 829
RECEIPTS LESS EXPENSES	$	$ 2 506	$ 3 707	$ 1 100
Total unpaid labor		766	758	728
Operator's labor		539	538	540
Family labor		227	220	188
Net income from investment and management		1 740	2 949	372
RATE EARNED ON INVESTMENT	%	7.08%	11.25%	1.90%
Return to capital and operator's labor and management		2 279	3 487	912
5% of capital invested		1 229	1 311	979
LABOR AND MANAGEMENT WAGE	$	$ 1 050	$ 2 176	$ -67

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$25	1	$11	3
23	1	9	3
21	0	7	2
19	3	5	4
17	3	3	3
15	0	1	3
13	2	-1	2

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net income, with those having the lowest income will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 179 acres each, the least successful 162 acres. This difference in size accounts in part for the variation in the average investments, receipts, and expenses in the two groups. Differences in receipts from the sale of cattle, hogs, feed and grains, and dairy sales accounts for most of the difference in income between the two groups. The total expense per farm and per acre, including the charge for family labor, was slightly higher on the most profitable farms than on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Grain Inventoried

	Corn		Oats	
	Jan. 1, '34	Dec. 31, '34	Jan. 1, '34,	Dec. 31, '34
Average of all farms	1 506	965	777	476
Average of 10 high farms	1 889	1 779	745	649
Average of 10 low farms	1 285	312	802	308
Your farm				

The difference in quantities of grain inventoried was one of the factors influencing the difference in earnings. The most profitable farms had a larger inventory of corn, both at the beginning and at the end of the year, and a larger inventory of oats at the end of the year than did the least profitable farms.

The average inventory increase for the accounting farms in Carroll County was $681 in 1934, as compared with $571 in 1933, and an inventory loss of $920 per farm in 1932. There were increases of $414 in total livestock, and $372 in feed and grain, while improvements showed a decrease of $96, and machinery a decrease of $9. The decrease in machinery and improvements was the smallest it has been since 1930, indicating that more of the necessary repairs and replacements are being made, but still not enough to offset the depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 770	$2 184	$414	$
Feed and grains	1 377	1 749	372	
Machinery	1 079	1 070	-9	
Improvements (except residence)	4 168	4 072	-96	
Total	$8 394	$9 075	$681	$

Some Adjustments on Carroll County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. Farm operating costs declined each year from 1929 through 1934. In 1934 total operating expenses were $1.10 an acre lower than in 1933, however the cash operating expenses were $1,682 a farm, as compared with $1,446 a farm in 1933. There were increases in expenditures over the previous year for feed and grain, livestock, crop expense and improvements, and a slight decrease in expenditures for taxes, labor and machinery. Because of the postponement of needed machinery replacements during the five years since 1929, we may expect an expansion of spending for these items as soon as incomes will permit.

Cash Income and Expenses on Accounting Farms in Carroll County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 429	$1 425	$	$3 045	$6 283
Feed and grains		478	1 165		376	362
Machinery		245	571		26	131
Improvements		104	241		---	---
Labor		85	268		57	37
Miscellaneous		23	35		3	3
Livestock expense		33	64		---	---
Crop expense		131	199		---	---
Taxes		154	245		---	---
Total	$	$1 682	$4 213	$	$3 507	$6 816
Excess of cash sales over expenses				$	$1 825	$2 603
Increase in inventory					681	324
Income to labor and capital (Receipts less expenses)					2 506	2 927

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average cash income in 1934 was 51 percent of that in 1929, while cash expenditures were only 40 percent as large. In 1934 livestock purchases were 30 percent, and feed and grain purchases 41 percent as large as in 1929. In 1934 these farms paid out 43 percent as much for machinery, 66 percent as much for crop expense, and 43 percent as much for improvements as in 1929, while taxes were reduced to 63 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

After deducting total expenses and net decreases, including family labor, from income and net increases, there remained a net increase of $16.44 per acre for the most profitable farms, as compared with $2.30 per acre for the least profitable farms. This represents a return on the capital invested in the farm business of 11.25 percent on the most profitable farms, and 1.9 percent on the least profitable farms. The reasons for the difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were more intensive, and more efficient in their livestock production than the least profitable farms. The most profitable farms had an investment in productive livestock of $10.48 per acre, and fed $2,550 of feed per farm, as compared with an investment of $6.85 invested per acre and $1,672 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $153 for each $100 of feed fed, as compared with a return of $110 for the least profitable farms. On the most profitable farms 17 litters were farrowed, while 10 litters were farrowed on the least profitable farms. The return per litter farrowed was $95 on the most profitable farms, as compared with $86 on the least profitable farms. Cattle on the most profitable farms returned $186 per $100 invested, and $106 on the least profitable farms. Dairy sales per dairy cow were $73 on the most profitable farms, and $58 on the least profitable farms.

In Carroll County the most profitable farms were 17.7 acres larger, and a larger percentage of their land area was tillable than on the least profitable farms. The most profitable farms had 36.4 acres more crops, and 24.3 acres more corn than the least profitable farms. The most profitable farms carried larger inventories of feed and grains on which to make a profit when prices advanced. In addition to the larger acreage of crops, another reason for the larger inventories of feed and grain was the higher crop yields. There was an advantage of 15.5 bushels of corn, and 9.4 bushels of oats per acre in favor of the high-profit group.

The larger income on the most profitable farms was secured with a total operating cost of only 45 cents an acre above that on the least profitable farms. The man labor costs were $6.70 per crop acre on the most profitable farms, as compared with $8.05 on the least profitable farms, while power and machinery costs per crop acre amounted to $3.97 on the most profitable farms, and $3.79 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	9	$153	--	$--	9	$299	$345
1/3 least profitable farms	9	71	--	--	9	141	190
All accounting farms	25	106	1	24	28	180	268

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $114 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 12.8 contracted acres which were used as follows: 2.9 idle; 3.6 mixed red clover and timothy; 1.5 sweet clover; 3.7 soybeans; 0.4 alfalfa; and 0.7 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program, there would have been but little corn in the hand of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 30 Carroll County Farms in 1934

Items	Your farm	Average of 30 farms	10 most profitable farms	10 least profitable farms
Size of farms--acres		177.9	179.4	161.7
Percent of land area tillable		84.4	88.2	77.5
Percent of tillable land in hay and pasture		43.6	35.8	48.2
Gross receipts per acre		18.89	26.52	11.93
Total expenses per acre		9.11	10.08	9.63
Net receipts per acre		9.78	16.44	2.30
Value of land per acre		91	93	78
Total investment per acre		138	146	121
Acres in Corn		35.3	47.8	23.5
Oats		28.0	28.6	26.7
Wheat		1.3	2.5	.6
Hay		27.9	24.6	25.0
Tillable pasture		37.7	32.0	35.4
Crop yields--Corn, bu. per acre		39.3	44.8	29.3
Oats, bu. per acre		14.9	19.4	10
Wheat, bu. per acre		24.2	1.9	2
Value of feed fed to productive L.S.		2 188	2 550	1 672
Returns per $100 of feed fed to productive livestock		137	153	110
Returns per $100 invested in:				
Cattle		141	186	106
Poultry		249	261	199
Number of litters farrowed		14.0	17.2	10.3
Pigs weaned per litter		6.0	5.9	5.8
Income per litter farrowed		69	95	86
Dairy sales per dairy cow		64	73	58
Investment in productive L.S. per A.		9.04	10.48	6.85
Receipts from productive L.S. per A.		16.82	21.74	11.37
Man labor cost per crop acre		7.05	6.70	8.05
Machinery cost per crop acre		2.02	2.54	1.75
Power and mach. cost per crop A.		3.76	3.97	3.79
Farms with tractor		57%	70%	50%
Value of feed fed to horses		234	219	228
Man labor cost per $100 gross income		24	18	38
Expenses per $100 gross income		48	38	81
Farm improvements cost per acre		1.12	1.05	.86
Excess of sales over cash expenses		1 825	2 114	1 232
Increase in inventory		681	1 593	-132
Rate earned on investment		7.08%	11.25%	1.90%
Gross receipts per farm		3 360	4 758	1 929

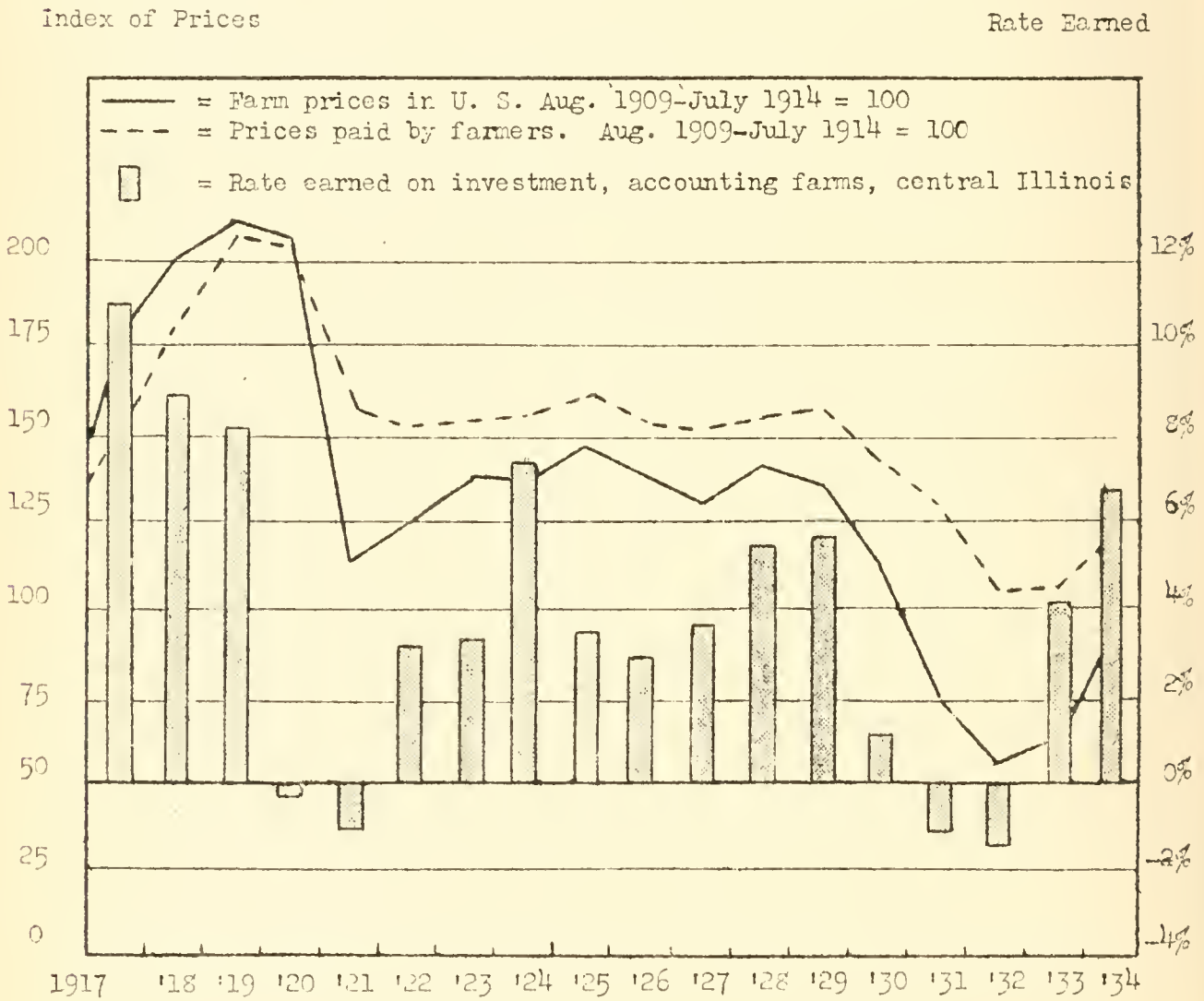
Chart for Studying the Efficiency of Various Parts of Your Business, Carroll County, 1934

The numbers above the lines across the middle of the page are the averages for the 30 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that ofother farmers in your locality.

Rate earned on investment	Bushels per acre		Number of litters farrowed	Hogs: Inoome per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats						Labor	Power and machinery				Per acre	Per farm	
15.1	54	25	29	144	139	499	287	1.55	--	--	2200	4300	34	5900	278
13.5	51	23	26	129	124	449	257	2.65	--	--	1900	3800	31	5400	258
11.9	48	21	23	114	109	399	227	3.75	.76	3	1600	3300	28	4900	238
10.3	45	19	20	99	94	349	197	4.85	1.76	10	1300	2800	25	4400	218
8.7	42	17	17	84	79	299	167	5.95	2.76	17	1000	2300	22	3900	198
7.08	39.3	14.9	14	69	64	249	137	7.05	3.76	24	681	1825	18.89	3360	177.9
5.5	36	13	11	54	49	199	107	8.15	4.76	31	400	1300	16	2900	158
3.9	33	11	8	39	34	149	77	9.25	5.76	38	100	800	13	2400	138
2.3	30	9	5	24	19	99	47	10.35	6.76	45	-200	300	10	1900	118
.7	27	7	2	9	4	49	17	11.45	7.76	52	-500	--	7	1400	98
-.9	24	5	--	--	--	--	--	12.55	8.76	59	-800	--	4	900	78

Influence of Price Changes on Farm Earnings

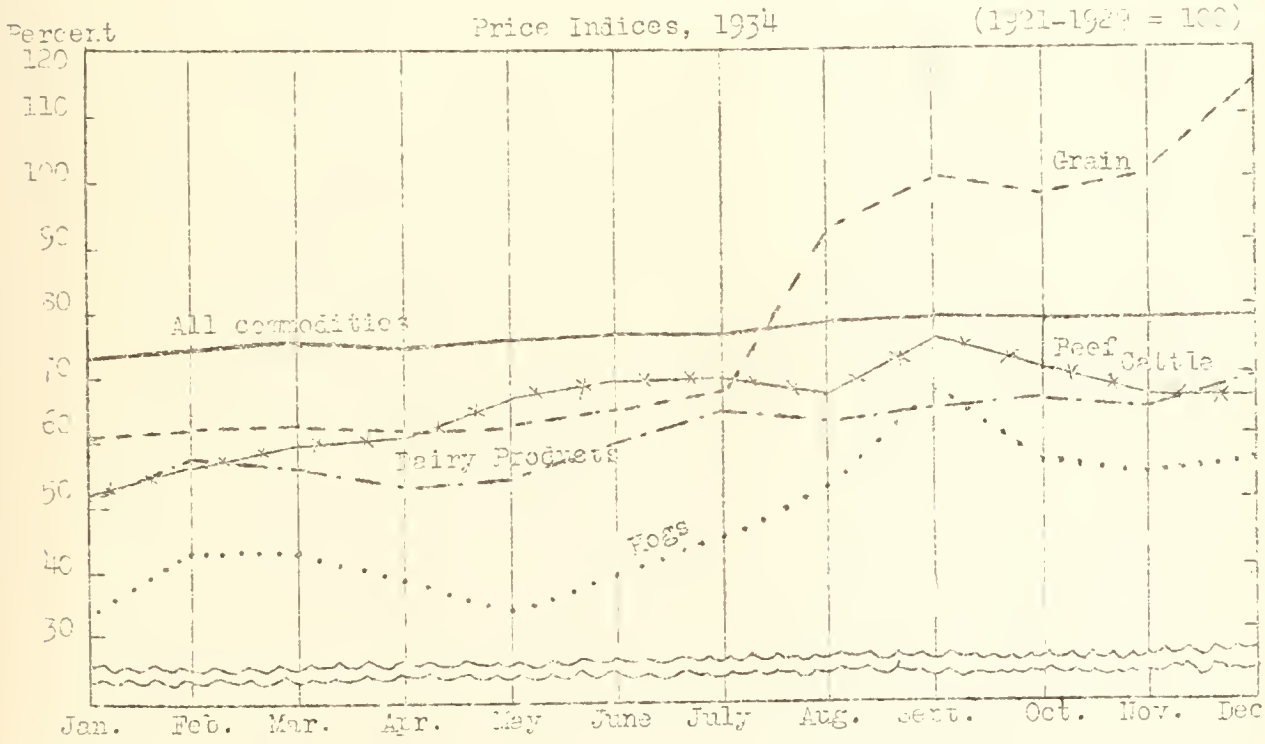
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Carroll County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was below average, the increased prices of both grain and livestock caused the 1934 earnings to be the highest for the five-year period 1930-1934.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Carroll County for 1930-1934

Items	1930 1/	1931 1/	1932 2/	1933 2/	1934
Number of farms	59	62	32	33	30
Average size of farms, acres	178	177	155	157	178
Average rate earned, to pay for management, risk and capital	2.2%	-3.1%	-2.0%	4.4%	7.1%
Average labor and management wage	$-243	$-2 094	$-1 294	$398	$1 050
Gross income per acre	22.19	11.80	10.14	17.14	18.89
Operating cost per acre	17.89	17.63	13.54	10.21	9.11
Average value of land per acre	120	117	107	103	91
Total investment per acre	194	186	169	156	138
Investment per farm in:					
Total livestock	4 025	3 427	2 290	1 694	1 770
Cattle	2 067	1 720	1 280	883	902
Hogs	1 208	1 005	483	348	383
Poultry	209	171	136	96	94
Gross income per farm	3 956	2 089	1 568	2 699	3 360
Income per farm from:					
Crops	---	---	---	703	270
Miscellaneous income	42	60	53	53	3
Total livestock	3 914	2 029	1 515	1 943	3 030
Cattle	691	279	284	410	831
Dairy sales	684	486	446	415	580
Hogs	2 167	1 009	587	915	1 278
Poultry	350	237	194	165	86
Average yield of corn in bu.	46	45	65	56	39
Average yield of oats in bu.	46	41	55	35	15

1/ Records from Rock Island and Whiteside Counties included for 1930 and 1931.
2/ Records from Whiteside County included for 1932 and 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-FIVE FARMS IN ROCK ISLAND COUNTY, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and T. R. Hedges*

The farm earnings of 35 account-keeping farmers in Rock Island County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 35 accounts show for 1934 an average net income of $1,711 per farm, as compared with an average of $1,440 in 1933 and an average net loss of $591 in 1932. The average cash income in 1934 was $3,357 per farm, the cash business expenditures $1,524 per farm, leaving a cash balance of $1,833 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $607 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,440 per farm. The inventory increase was a smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*J. R. Spencer, farm adviser in Rock Island County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 35 accounting farms the most successful third shows an average net income of $2,748, while the average net income of the least successful third of the farms was only $713. In 1933 the comparable net income for the two groups was $2,760, and $577 respectively.

Investments, Receipts, Expenses and Earnings on
35 Rock Island County Farms in 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		18 151	18 559	16 575
Farm improvements		4 552	4 007	5 202
Livestock total		1 924	2 089	1 904
Horses		380	426	362
Cattle		849	928	798
Hogs		478	492	476
Sheep		127	150	126
Poultry		90	93	82
Machinery and equipment		1 561	1 380	1 670
Feed and grains		1 660	1 752	1 303
Total capital investment	$	$27 848	$27 787	$26 654
RECEIPTS AND NET INCREASES				
Livestock total		2 732	3 414	2 139
Horses		28	50	13
Cattle		570	931	350
Hogs (including AAA payments)		1 518	1 756	1 207
Sheep		94	133	109
Poultry		76	72	34
Egg sales		120	120	76
Dairy sales		326	352	350
Feed and grains (including AAA payments)		600	970	260
Labor off farm		72	55	71
Miscellaneous receipts		4	7	---
Total receipts & net increases	$	$ 3 408	$ 4 446	$ 2 470
EXPENSES AND NET DECREASES				
Farm improvements		161	205	166
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		302	269	364
Feed and grains		---	---	---
Livestock expense		39	31	42
Crop expense		101	101	113
Hired labor		107	167	84
Taxes		231	226	210
Miscellaneous expenses		27	27	29
Total expenses & net decreases	$	$ 968	$ 1 026	$ 1 008
RECEIPTS LESS EXPENSES	$	$ 2 440	$ 3 420	$ 1 462
Total unpaid labor		729	672	749
Operator's labor		536	529	540
Family labor		193	143	209
Net income from investment and management		1 711	2 748	713
RATE EARNED ON INVESTMENT	%	6.14%	9.89%	2.67%
Return to capital and operator's labor and management		2 247	3 277	1 253
5% of capital invested		1 392	1 389	1 330
LABOR AND MANAGEMENT WAGE	$	$ 855	$ 1 888	$ -80

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19	2	$9	6
17	1	7	5
15	4	5	6
13	--	3	3
11	5	1	3

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 193.2 acres each, the least successful 178.8 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of grains, cattle, and hogs accounts for most of the difference in income between the two groups. Although the expenses per farm were slightly higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 641	1 391
Average of 12 most successful farms	3 035	1 868
Average of 12 least successful farms	2 101	968
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and at the end of the year. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Rock Island County was $607 in 1934, as compared with $848 in 1933, and an inventory loss of $686 per farm in 1932. There were increases of $403 in total livestock, and $305 in feed and grain, while improvements showed a decrease of $77 and machinery a decrease of $24. The decrease in machinery and improvements was the smallest it has been since 1930, indicating that more of the necessary repairs and replacements are being made, but still not enough to offset the depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 924	$2 327	$403	$
Feed and grains	1 660	1 965	305	
Machinery	1 561	1 537	-24	
Improvements (except residence)	4 552	4 475	-77	
Total	$9 697	$10 304	$607	$

Some Adjustments on Rock Island County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. Farm operating costs declined each year from 1929 through 1933. In 1934 total operating expenses were only 2 cents an acre above those of 1933, while the cash operating expenses were $1,524 a farm, as compared with $1,622 in 1933. There were decreases in expenditures from the previous year for livestock, labor, and taxes which more than offset the increase in expenditures for feed, crop expense, improvements, and machinery. Indications point to an expansion of spending for 1935, particularly for machinery and improvements, since farmers have postponed replacements and repairs of these items during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Rock Island County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 271	$1 290	$	$2 600	$6 128
Feed and grains		332	863		627	665
Machinery		332	743		54	121
Improvements		84	283		---	---
Labor		107	342		72	36
Miscellaneous		27	36		4	3
Livestock expense		39	75		---	---
Crop expense		101	213		---	---
Taxes		231	321		---	---
Total	$	$1 524	$4 166	$	$3 357	$6 953
Excess of cash sales over expenses				$	$1 833	$2 787
Increase in inventory					607	275
Income to labor and capital (Receipts less expenses)					2 440	3 062

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 48.3 percent of that in 1929, cash expenditures were only 36.6 as large. In 1934 livestock purchases were 21 percent, and feed and grain purchases 38.5 percent as large as in 1929. In 1934 these farms paid out 44.7 percent as much for machinery, and 47.4 percent as much for crop expense as in 1929, while taxes were reduced to 72 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $14.22, as compared with $3.98 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms had more livestock, and were more efficient in their livestock operations than the least profitable farms. The most profitable farms had an investment of $10.09 an acre in productive livestock, as compared with an investment of $8.95 an acre on the least profitable farms. The most profitable farms fed $2,547 worth of feed to productive livestock, securing a return of $132 for each $100 worth of feed fed, while the least profitable farms fed $2,063 worth of feed and secured only $103 for each $100 worth of feed fed.

The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. Farms in this group were 14.4 acres larger than the least successful; they had 20.9 more tillable acres, a larger acreage of corn, and a higher percent of their tillable land in hay and pasture. Corn yields were 4.3 bushels per acre higher on the most profitable farms and while oats yields were 2.8 bushels higher on the least profitable farms, it must be recalled that this crop was almost a failure in 1934 and that the early oats suffered the most from the drouth.

Total operating costs were $1.04 per acre higher on the least profitable farms. Their power and machinery costs were $5.15 per crop acre, as compared with $3.85 on the most profitable farms. This difference in power and machinery costs per crop acre was a major factor in accounting for the higher total operating expenses on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	12	$129	--	$---	11	$196	$308
1/3 least profitable farms	12	95	1	17	12	163	259
All accounting farms	35	111	2	66	34	187	296

1/ Total benefit payments reported by accounting farms under contract for 1934, divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received ($296), were more than sufficient to pay all of the 1934 taxes ($231).

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 17.7 contracted acres which were used as follows: 3.7 idle; .6 red clover; 1.7 sweet clover; 3.6 soybeans and cowpeas; 3.3 alfalfa; and 4.8 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program, there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
35 Rock Island County Farms in 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
Size of farms--acres	____	187.4	193.2	178.8
Percent of land area tillable	____	83.7	86.9	82.2
Percent of tillable land in hay and pasture	____	43.7	49.9	41.7
Gross receipts per acre	____	18.19	23.01	13.81
Total expenses per acre	____	9.06	8.79	9.83
Net receipts per acre	____	9.13	14.22	3.98
Value of land per acre	____	97	96	93
Total investment per acre	____	149	144	149
Acres in Corn	____	53.5	56.8	47.7
Oats	____	21	18.3	16.5
Wheat	____	3.8	---	5.8
Soybeans	____	2.1	1.3	3.2
Hay	____	26.9	30.9	26.3
Tillable pasture	____	41.6	52.8	35
Crop yields--Corn, bu. per acre	____	35.8	38.3	34
Oats, bu. per acre	____	4.6	3.6	6.4
Value of feed fed to productive L.S.	____	2 238	2 547	2 063
Returns per $100 of feed fed to productive livestock	____	121	132	103
Returns per $100 invested in:				
Cattle	____	99	125	86
Poultry	____	315	204	138
Pigs weaned per litter	____	5.6	5.8	5.2
Income per litter farrowed	____	93	102	80
Dairy sales per dairy cow	____	44	43	41
Investment in productive L.S. per A.	____	9.25	10.09	8.95
Receipts from productive L.S. per A.	____	14.43	17.41	11.89
Man labor cost per crop acre	____	6.81	6.94	7.04
Machinery cost per crop acre	____	2.62	2.33	3.25
Power and mach. cost per crop A.	____	4.33	3.85	5.15
Farms with tractor	____	85%	83%	83%
Value of feed fed to horses	____	226	224	226
Man labor cost per $100 gross income	____	23	18	32
Expenses per $100 gross income	____	50	38	71
Farm improvements cost per acre	____	.86	1.06	.93
Excess of sales over cash expenses	____	1 833	1 975	1 467
Increase in inventory	____	607	1 445	-5
Rate earned on investment	____	6.14	9.89	2.67
Gross receipts per farm	____	3 408	4 446	2 470

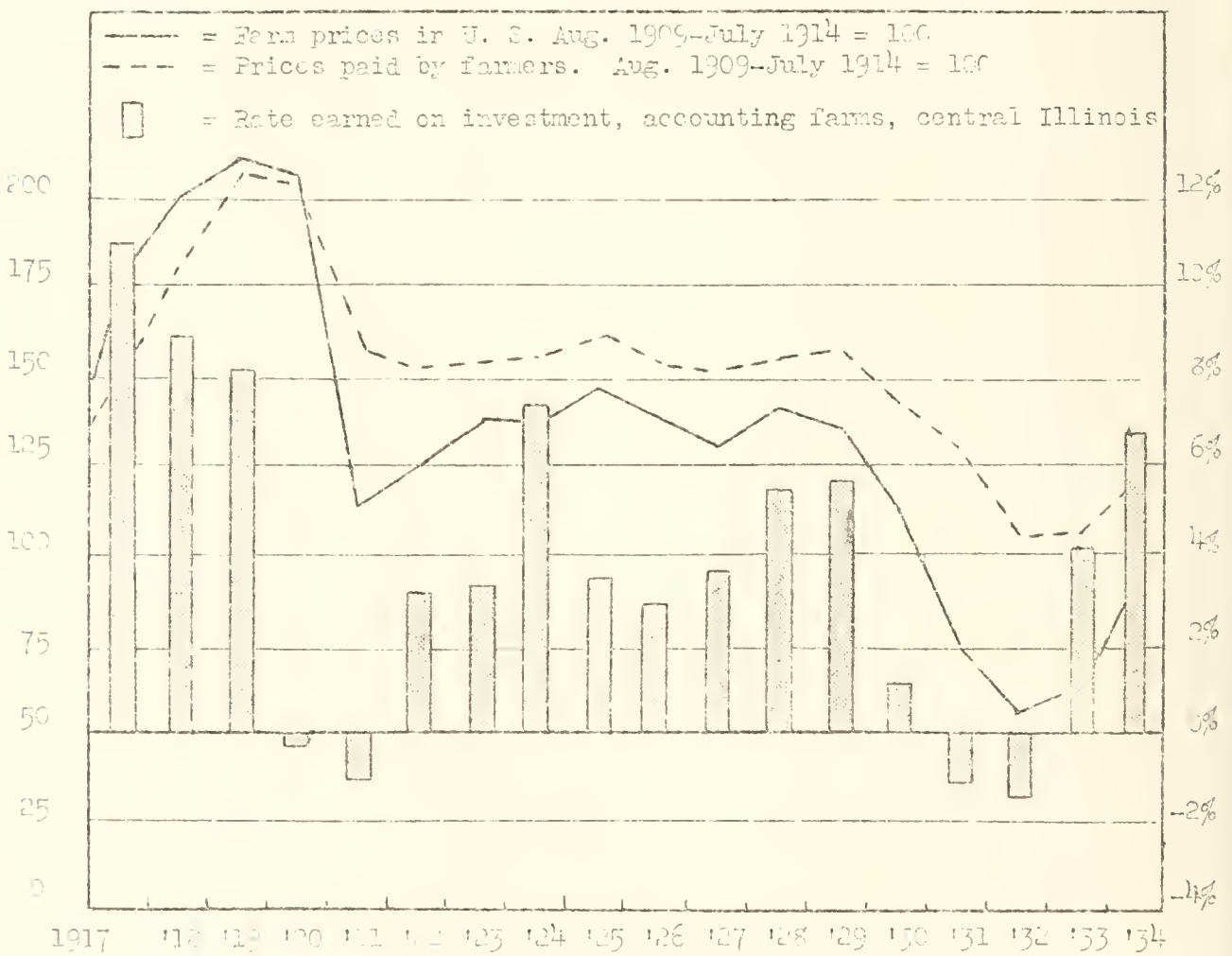
Chart for Studying the Efficiency of Various Parts of Your Business, Rock Island County 1934

The numbers above the lines across the middle of the page are the averages for the 35 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre		Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	U.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats					Labor	Power and machinery				Per acre	Per farm	
11	60	15	128	64	440	170	4.30	1.80	3	2600	4300	33	3400	340
10	55	13	121	60	415	160	4.80	2.30	7	2200	3800	30	7400	310
9	50	11	114	56	390	150	5.30	2.80	11	1800	3300	27	6400	280
8	45	9	107	52	365	140	5.80	3.30	15	1400	2800	24	5400	250
7	40	7	100	48	340	130	6.30	3.80	19	1000	2300	21	4400	220
6.14	35.8	4.6	93	44	315	121	6.81	4.33	23	607	1833	18	3408	187
5	30	3	86	40	290	110	7.30	4.80	27	200	1300	15	2400	160
4	25	1	79	36	265	100	7.80	5.30	31	-200	800	12	1400	130
3	20	---	72	32	240	90	8.30	5.80	35	-600	300	9	400	100
2	15	---	65	28	215	80	8.80	6.30	39	-1000	---	6	---	70
1	10	---	59	24	190	70	9.30	6.80	43	-1400	---	3	---	40

Influence of Price Changes on Farm Earnings

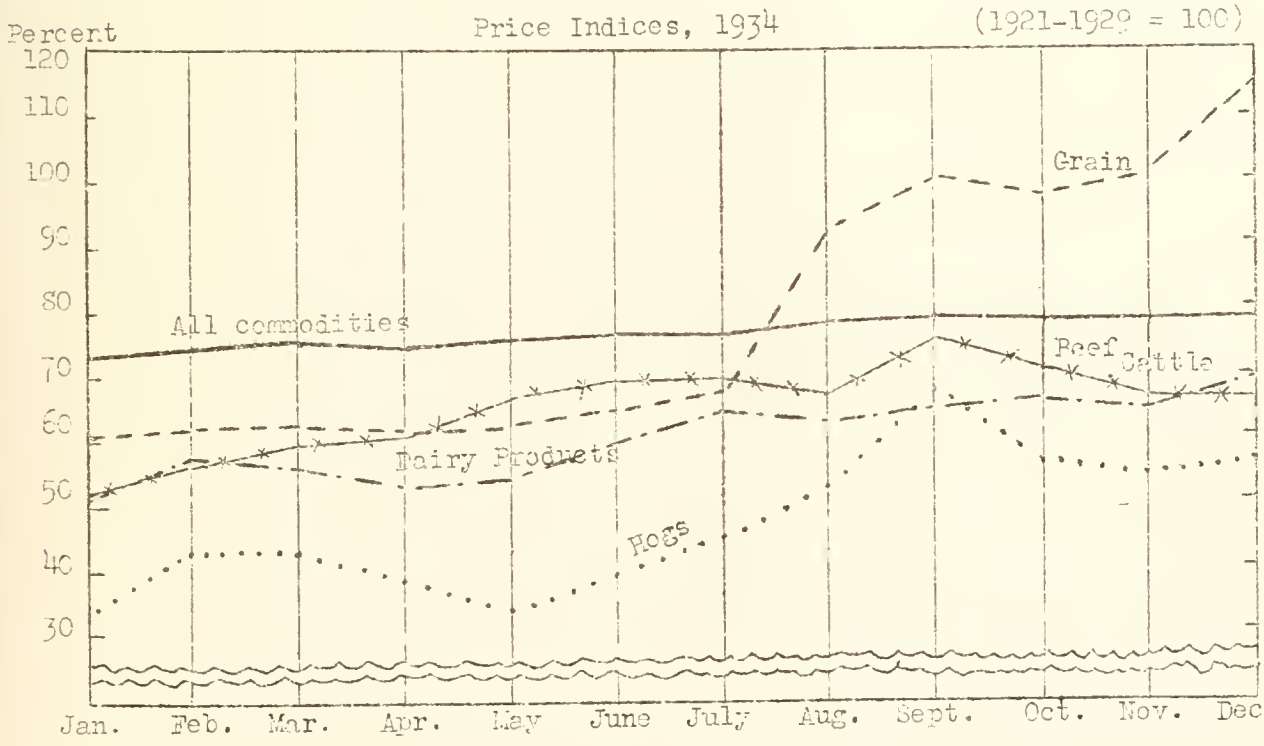
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Rock Island County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure and followed the smaller than average crop of 1933, the increased prices of both grain and livestock caused the 1934 earnings to be the highest, for the five-year period 1930-1934.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Rock Island County for 1930-1934

Items	1930 1/	1931 1/	1932	1933	1934
Number of farms	59	62	30	30	35
Average size of farms, acres	178	177	188	195	187
Average rate earned, to pay for management, risk and capital	2.2%	-3.1%	-2.1%	5.1%	6.14%
Average labor and management wage	$-243	$-2 094	$-1 488	$559	$355
Gross income per acre	22.19	11.80	7.82	16.44	18.19
Operating cost per acre	17.89	17.63	10.96	9.04	9.06
Average value of land per acre	120	117	100	94	97
Total investment per acre	194	186	152	144	149
Investment per farm in:					
Total livestock	4 025	3 427	2 162	2 049	1 924
Cattle	2 067	1 720	1 070	1 033	349
Hogs	1 208	1 005	539	499	478
Poultry	209	171	121	93	90
Gross income per farm	3 956	2 089	1 470	3 199	3 408
Income per farm from:					
Crops	---	---	---	1 097	600
Miscellaneous income	42	60	54	48	4
Total livestock	3 914	2 029	1 416	2 054	2 732
Cattle	691	279	253	461	570
Dairy sales	684	486	282	240	326
Hogs	2 167	1 009	741	1 141	1 518
Poultry	350	237	120	146	76
Average yield of corn in bu.	46	45	66	53	36
Average yield of oats in bu.	46	41	48	34	5

1/ Records from Carroll and Whiteside Counties included for 1930 and 1931.

ANNUAL FARM BUSINESS REPORT ON FORTY-THREE FARMS IN JO DAVIESS AND STEPHENSON COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. D. Wills, and T. R. Hedges

The farm earnings of 43 account-keeping farmers in Jo Daviess and Stephenson Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 43 accounts show for 1934 an average net income of $1,253 per farm, as compared with an average of $447 in 1933, and an average net loss of $836 in 1932. The average cash income in 1934 was $2,823 per farm, the cash business expenditures $1,220 per farm, leaving a cash balance of $1,603 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $449 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,052 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* H. R. Brunnemeyer and V. J. Banter, farm advisers in Jo Daviess and Stephenson Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 43 accounting farms the most successful third shows an average net income of $2,225, while the average net income of the least successful third of the farms was only $184. In 1933 the net income for the most successful third was $1,248, while the least successful third of the farms had a net loss of $276.

Investments, Receipts, Expenses and Earnings on 43
Jo Daviess, Stephenson County Farms in 1934

Items	Your farm	Average of 43 farms	14 most profitable farms	14 least profitable farms
CAPITAL INVESTMENTS				
Land		13 287	12 722	13 736
Farm improvements		5 067	5 131	4 855
Livestock total		2 001	2 001	2 213
Horses		317	264	371
Cattle		1 317	1 358	1 407
Hogs		221	267	237
Sheep		56	19	109
Poultry		90	93	89
Machinery and equipment		1 379	1 406	1 425
Feed and grains		1 085	1 164	989
Total capital investment	$	$22 819	$22 424	$23 218
RECEIPTS AND NET INCREASES				
Livestock total		2 463	3 121	1 891
Horses		3	5	9
Cattle		486	543	511
Hogs (including AAA payments)		860	1 326	594
Sheep		64	18	123
Poultry		81	87	53
Egg sales		131	149	125
Dariy sales		838	993	476
Feed and grains (including AAA payments)		327	562	---
Labor off farm		107	155	98
Miscellaneous receipts		7	---	16
Total receipts & net increases	$	$ 2 904	$ 3 838	$ 2 005
EXPENSES AND NET DECREASES				
Farm improvements		169	189	153
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		266	245	282
Feed and grains		---	---	130
Livestock expense		39	60	30
Crop expense		97	120	75
Hired labor		106	87	99
Taxes		146	127	161
Miscellaneous expenses		29	34	23
Total expenses & net decreases	$	$ 852	$ 862	$ 953
RECEIPTS LESS EXPENSES	$	$ 2 052	$ 2 976	$ 1 052
Total unpaid labor		799	751	868
Operator's labor		534	537	536
Family labor		265	214	332
Net income from investment and management		1 253	2 225	184
RATE EARNED ON INVESTMENT	%	5.49%	9.92%	.79%
Return to capital and operator's labor and management		1 787	2 762	720
% of capital invested		1 141	1 121	1 161
LABOR AND MANAGEMENT WAGE	$	$ 646	$ 1 641	$ -441

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19 and over	2	$7	3
17	3	5	6
15	4	3	7
13	2	1	3
11	3	-1	3
9	6	-3	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms averaged 171.5 acres each, the least profitable 232.9 acres. Because of their smaller investment in land, the most profitable group had a smaller total investment than either the least profitable farms, or the average of all accounting farms. The most profitable farms, in spite of their smaller size had a much larger income from productive livestock, and feed and grains than the least profitable farms. The most profitable group also had less total expense per farm, including the charge for family labor, than the least successful farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	812	588
Average of 14 most successful farms	934	684
Average of 14 least successful farms	539	250
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and at the end of the year. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Jo Daviess and Stephenson Counties was $449 in 1934, as compared with $27 in 1933, and an inventory loss of $1,021 per farm in 1932. There were increases of $362 in feed and grains, and $233 in total livestock, while machinery showed a decrease of $73 and improvements a decrease of $73. On many farms the decrease in machinery and improvements was the smallest it has been since 1930, indicating that more of the necessary repairs and replacements are being made, but still not enough to offset the depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 001	$2 234	$233	$
Feed and grains	1 085	1 447	362	
Machinery	1 379	1 306	-73	
Improvements (except residence)	5 067	4 994	-73	
Total	$9 532	$9 981	$ 449	$

Some Adjustments on Jo Daviess and Stephenson County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 66 cents an acre higher in 1934 than in 1933, while the cash operating expenses were $1,220 per farm in 1934, as compared with $1,113 in 1933. There were significant increases in expenditures from the previous year for livestock, feed and grains, improvements and crop expenses. The expenditures for taxes and machinery were considerably less in 1934 than in 1933. If farm incomes continue to increase, indications point to an expansion of spending for 1935, particularly for machinery and improvements, since farmers have postponed replacements and repairs of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Jo Daviess and Stephenson Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 240	$ 617	$	$2 470	$5 155
Feed and grains		228	626		193	224
Machinery		239	556		46	105
Improvements		96	255		---	1
Labor		106	281		107	40
Miscellaneous		29	32		7	17
Livestock expense		39	43		---	---
Crop expense		97	160		---	---
Taxes		146	203		---	---
Total	$	$1 220	$2 773	$	$2 823	$5 542
Excess of cash sales over expenses				$	$1 603	$2 769
Increase in inventory					449	250
Income to labor and capital (Receipts less expenses)					2 052	3 019

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 51 percent of that in 1929, cash expenditures were only 44 percent as large. In 1934 livestock purchases were 39 percent and feed and grain purchases 36 percent as large as in 1929. In 1934 these farms paid out 43 percent as much for machinery, 38 percent as much for improvements, and 60 percent as much for crop expense as in 1929, while taxes were reduced to 72 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $12.97, as compared with $0.79 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms had more livestock, and were more efficient in their livestock operations than the least profitable farms. The most profitable farms had an investment of $11.29 an acre in productive livestock, as compared with an investment of $8.38 an acre on the least profitable farms. The most profitable farms fed $1,988 worth of feed to productive livestock, and secured a return of $157 for each $100 worth of feed fed, while the least profitable farms fed $1,740 worth of feed, and secured only $106 for each $100 worth of feed fed. The most profitable farms had an average of 11.5 litters per farm, weaned an average of 6.6 pigs per litter, and had an income of $103 per litter. The comparable figures for the least profitable farms were 7.2 litters per farm, 5.0 pigs weaned per litter, and an income of $68 per litter.

The most profitable farms, although 61.4 acres smaller in size, had a much larger proportion of their land area tillable than the least profitable farms, and had 103.2 acres of crops as compared with 89.0 acres of crops on the least profitable farms. The most profitable farms had 7.4 acres more corn, and 7.2 acres more oats than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. In addition to the larger acreage of crops, another reason for the larger inventories of feed and grains was the higher crop yields, there being an advantage of 9.2 bushels of corn, and 2.3 bushels of oats per acre in favor of the high profit group.

The larger income on the most profitable farms was secured with a total operating expense of only $1.59 an acre above that on the least profitable farms. Man labor costs per crop acre was $7.29 on the most profitable farms, as compared with $10.36 on the least profitable farms, while power and machinery cost per crop acre was $4.10 on the most profitable farms, and $4.87 on the least profitable group.

Influences of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	11	$77	--	$--	13	$187	$234
1/3 least profitable farms	10	46	--	--	12	105	123
All accounting farms	34	62	--	--	38	132	166

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $20 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 10.7 contracted acres which were used as follows: 1.1 idle; 3.3 mixed red clover and timothy; 1.3 sweet clover; 2.0 soybeans; 1.5 alfalfa; and 1.5 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were, on many farms, the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 43
Jo Daviess and Stephenson County Farms in 1934

Items	Your farm	Average of 43 farms	14 most profitable farms	14 least profitable farms
Size of farms--acres		191.9	171.5	232.9
Percent of land area tillable		69.1	79.2	53.6
Percent of tillable land in hay and pasture		53.1	51.7	59.1
Gross receipts per acre		15.13	22.38	8.61
Total expenses per acre		8.60	9.41	7.82
Net receipts per acre		6.53	12.97	.79
Value of land per acre		69	74	59
Total investment per acre		119	131	100
Acres in Corn		25.0	27.2	19.8
Oats		21.7	24.8	19.6
Hay		37.4	37.6	38.0
Tillable pasture		33.0	32.6	35.8
Crop yields--Corn, bu. per acre		39.6	41.2	31.4
Oats, bu. per acre		13.2	14.2	11.9
Value of feed fed to productive L.S.		1 900	1 988	1 740
Returns per $100 of feed fed to productive livestock		129	157	108
Returns per $100 invested in:				
Cattle		98	103	70
Poultry		226	236	1 936
Number of litters		9.0	11.5	7.2
Pigs weaned per litter		6.3	6.6	6.0
Income per litter farrowed		87	103	68
Dairy sales per dairy cow		63	72	97
Investment in productive L.S. per A.		9.33	11.29	8.38
Receipts from productive L.S. per A.		12.82	18.17	8.08
Man labor cost per crop acre		8.48	7.29	10.36
Machinery cost per crop acre		2.67	2.37	3.17
Power and mach. cost per crop A.		4.43	4.10	4.87
Farms with tractor		65%	78.6%	64%
Value of feed fed to horses		178	184	160
Man labor cost per $100 gross income		29	19	46
Expenses per $100 gross income		57	42	91
Farm improvements cost per acre		.88	1.10	.66
Excess of sales over cash expenses		1 603	2 120	1 010
Increase in inventory		449	856	42
Rate earned on investment		5.49%	9.92%	.79%
Gross receipts per farm		2 904	3 838	2 005

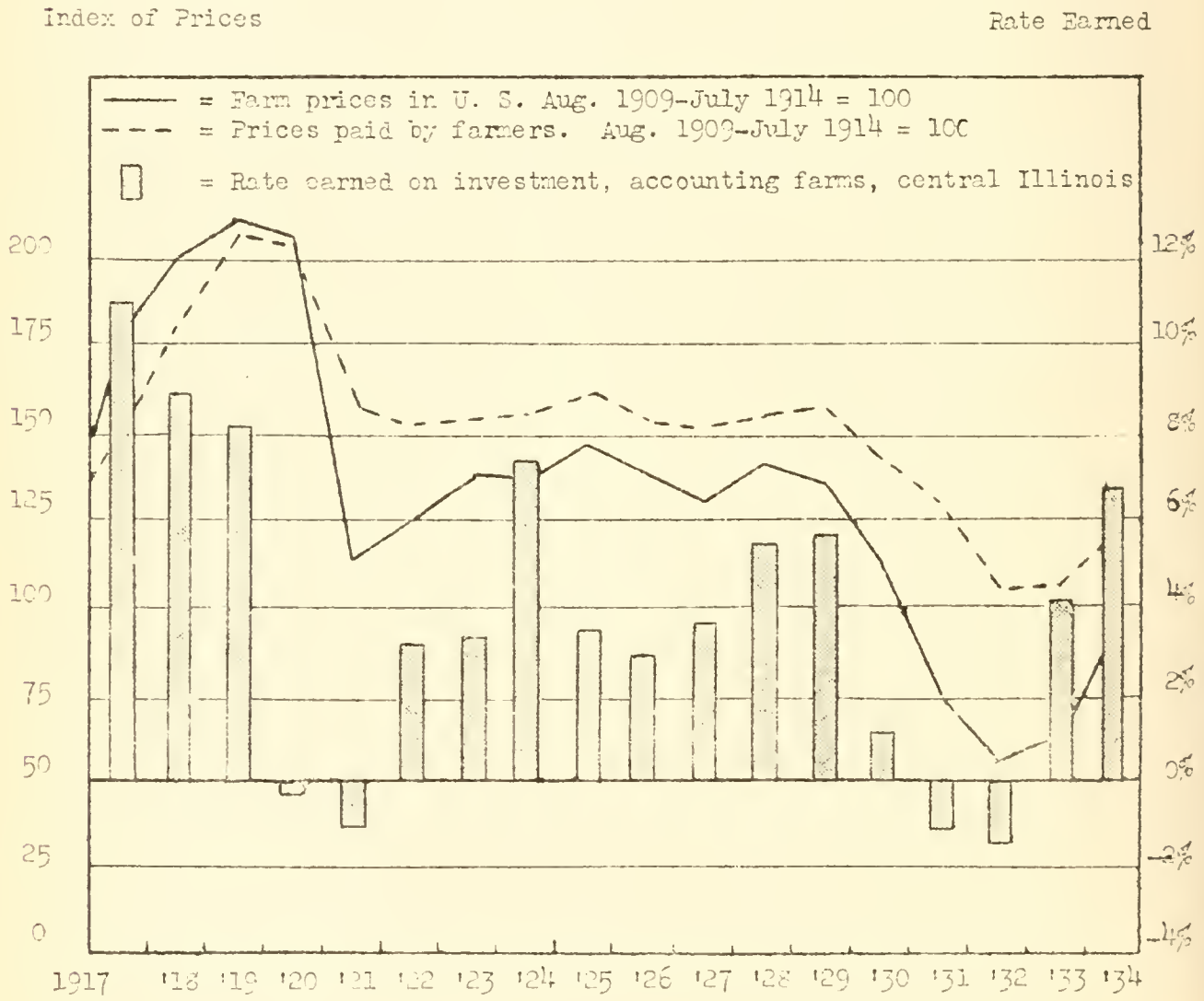
Chart for Studying the Efficiency of Various Parts of Your Business,
Jo Daviess, and Stephenson Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 43 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre		Number of litters	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats						Labor	Power and machinery				Per acre	Per farm	
12.5	70	28	14	152	103	476	379	.48	--	--	2449	3350	40	5900	392
11.1	64	25	13	139	95	426	329	2.08	--	--	2049	3000	35	5300	352
9.7	58	22	12	126	87	376	279	3.68	.23	5	1649	2650	30	4700	312
8.3	52	19	11	113	79	326	229	5.28	1.63	13	1249	2300	25	4100	272
6.9	46	16	10	100	71	276	179	6.88	3.03	21	849	1950	20	3500	232
5.49	39.6	13.2	9.0	87	63	226	129	8.48	4.43	29	449	1603	15.13	2904	191.9
4.1	34	10	8	74	55	176	79	10.08	5.83	37	49	1250	10	2300	152
2.7	28	7	7	61	47	126	29	11.68	7.23	45	-351	900	5	1700	112
1.3	22	4	6	48	39	76	--	13.28	8.63	53	-751	550	0	1100	72
-.1	16	1	5	35	31	26	--	14.88	10.03	61	-1151	200	--	500	32
-1.5	10	--	4	22	23	--	--	16.48	11.43	69	-1551	--	--	--	--

Influence of Price Changes on Farm Earnings

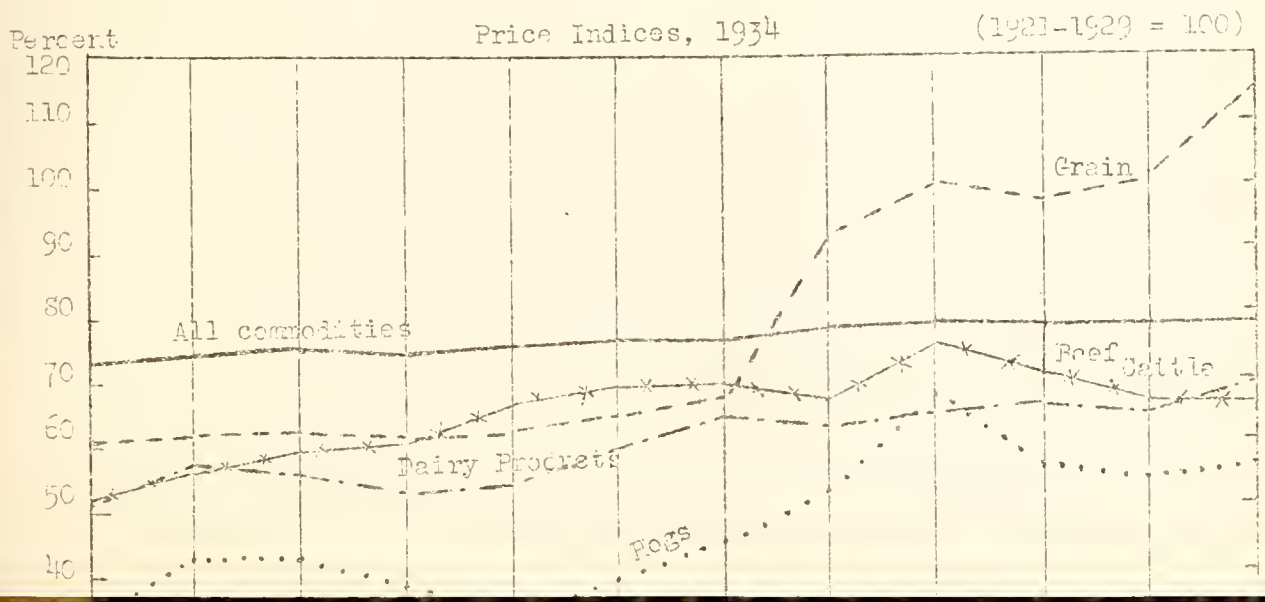
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



Variations in Earnings Over Five-Year Period

A comparison of production, income, and expenditure on the accounting farms in Jo Daviess and Stephenson counties for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 corn crop was almost average in this area, the small grain crops were almost a failure and followed the smaller than average small grain crop of 1933. The increased prices of both grain and livestock caused the 1934 earnings to be the highest for the five year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms
Jo Daviess and Stephenson Counties for 1930-1934

Items	1930 2/	1931 2/	1932 2/	1933	1934
Number of farms	30	30	30	36	43
Average size of farms, acres	213	217	223	216	192
Average rate earned, to pay for management, risk and capital	3.8%	-2.5%	-3.3%	1.7%	5.5%
Average labor and management wage	$ 311	$-1 727	$-1 558	$-309	$ 646
Gross income per acre	16.87	9.85	6.22	10.00	15.13
Operating cost per acre	11.23	13.40	9.97	7.94	8.60
Average value of land per acre	91	84	67	72	69
Total investment per acre	149	142	113	120	119
Investment per farm in:					
Total livestock	4 158	3 700	2 611	2 269	2 001
Cattle	2 603	2 243	1 678	1 463	1 317
Hogs	841	702	332	303	221
Poultry	203	140	126	86	90
Gross income per farm	3 595	2 141	1 386	2 164	2 904
Income per farm from:					
Crops	---	---	---	213	327
Miscellaneous income	42	89	112	65	7
Total livestock	3 553	2 052	1 274	1 886	2 463
Cattle	468	81	70	387	486
Dairy sales	1 183	899	523	677	838
Hogs	1 589	797	483	625	860
Poultry	285	256	193	134	~~81~~ 212
Average yield of corn in bu.	47	40	48	40	40
Average yield of oats in bu.	51	40	44	20	13

2/ Records from Jo Daviess County only for 1929-1932.

ANNUAL FARM BUSINESS REPORT ON SIXTY-EIGHT FARMS IN LEE, WHITESIDE, AND OGLE COUNTIES, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and A. L. Leonard*

The farm earnings of 68 account-keeping farmers in Lee, Whiteside, and Ogle counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the businesses of these farms. The three years previous to 1933 showed very low returns.

These 68 accounts show for 1934 an average net income of $2,089 per farm, as compared with an average of $1,410 in 1933, and an average net loss of $588 in 1932. The average cash income in 1934 was $4,349 per farm, the cash business expenditures $2,293 per farm, leaving a cash balance of $2,056 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $692 a farm due mostly to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,748 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*C. E. Yale, F. H. Shuman, and D. E. Warren, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans was much better compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 68 accounting farms the most successful third shows an average net income of $3,570, while the average net income on the least successful third of the farms was $865. In 1933, the comparable net income for the two groups was $2,843, and $186 respectively.

Investments, Receipts, Expenses and Earnings on 68
Lee, Whiteside, and Ogle County Farms in 1934

Items	Your farm	Average of 68 farms	23 most profitable farms	23 least profitable farms
CAPITAL INVESTMENTS				
Land		20 014	19 749	20 902
Farm improvements		4 837	4 814	4 511
Livestock total		2 237	2 713	1 857
Horses		400	387	477
Cattle		1 362	1 751	977
Hogs		330	379	288
Sheep		60	94	40
Poultry		85	102	75
Machinery and equipment		1 555	1 658	1 304
Feed and grains		1 809	2 217	1 539
Total capital investment	$	$30 452	$31 151	$30 113
RECEIPTS AND NET INCREASES				
Livestock total		2 999	4 144	1 963
Horses		23	54	---
Cattle		1 152	1 953	514
Hogs (including AAA payments)		1 043	1 368	660
Sheep		102	164	37
Poultry		73	74	65
Egg sales		114	113	111
Dairy sales		492	418	576
Feed and grains (including AAA payments)		820	1 234	577
Labor off farm		80	130	31
Miscellaneous receipts		8	17	4
Total receipts & net increases	$	$ 3 907	$ 5 525	$ 2 575
EXPENSES AND NET DECREASES				
Farm improvements		230	267	175
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		342	360	337
Feed and grains		---	---	---
Livestock expense		32	32	36
Crop expense		119	133	105
Hired labor		181	202	165
Taxes		228	239	210
Miscellaneous expenses		27	28	26
Total expenses & net decreases	$	$ 1 159	$ 1 261	$ 1 054
RECEIPTS LESS EXPENSES	$	$ 2 748	$ 4 264	$ 1 521
Total unpaid labor		659	694	656
Operator's labor		518	540	493
Family labor		141	154	163
Net income from investment and management		2 089	3 570	865
RATE EARNED ON INVESTMENT	%	6.86%	11.46%	2.87%
Return to capital and operator's labor and management		2 607	4 110	1 358
5% of capital invested		1 523	1 557	1 506
LABOR AND MANAGEMENT WAGE	$	$ 1 084	$ 2 553	$ -148

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$21 and over	5	$9	12
19.	2	7	9
17.	5	5	7
15.	7	3	4
13.	3	1	7
11.	6	-1	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net income, with those having the lowest income will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 205 acres each, the least successful 201 acres. The most profitable farms had a larger investment in total livestock and in feed and grains, and also a larger total farm investment than the least profitable farms. They had higher total receipts and net increases than the least profitable farms, due mostly to larger sales of cattle, hogs, and feed and grains. The total expense per farm and per acre, including the charge for family labor, was somewhat higher on the most profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	2 526	1 563
Average of 23 most successful farms . .	3 289	2 251
Average of 23 least successful farms. .	1 894	1 174
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and at the end of the year. With the rise in corn prices, this was one of the important factors accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms in Lee, Whiteside, and Ogle counties was $692 in 1934, as compared with $818 in 1933, and a decrease of $1,084 in 1932. There were increases of $382 in feed and grain, $286 in livestock, and $64 in improvements, and a decrease of $40 in machinery. The inventory decrease in machinery was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made, but still not enough to offset the current depreciation costs. The increase in the improvements inventory is of considerable interest, for it is the first time that such an increase has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory change 1934	Inventory changes, your farm
Total livestock	$2 237	$2 523	$286	$
Feed and grains	1 809	2 191	382	
Machinery	1 555	1 515	-40	
Improvements (except residence)	4 837	4 901	64	
Total	$10 438	$11 130	$692	$

Some Adjustments on Lee, Whiteside, and Ogle County Farms since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1930 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 26 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,293 a farm in 1934, as compared with $2,323 in 1933. There were increases in expenditures over 1933 for improvements, crop expense, and labor, and decreases in expenditures as compared with 1933 for livestock, taxes, and feed and grain. Indications point to an increase in expenditures for repairs and replacement of machinery in 1935, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Lee, Whiteside, and Ogle County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 651	$1 290	$	$3 364	$6 128
Feed and grains		367	863		805	665
Machinery		393	743		91	121
Improvements		295	283		1	---
Labor		181	342		80	36
Miscellaneous		27	36		8	3
Livestock expense		32	75		---	---
Crop expense		119	213		---	---
Taxes		228	321		---	---
Total	$	$2 293	$4 166	$	$4 349	$6 953
Excess of cash sales over expenses				$	$2 056	$2 787
Increase in inventory					692	275
Income to labor and capital (Receipts less expenses)					2 748	3 062

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average cash income in 1934 was 63 percent of that in 1929, while cash expenditures were only 55 percent as large. In 1934 livestock purchases were 50 percent, and feed and grain purchases 43 percent as large as in 1929. In 1934 these farms paid out 53 percent as much for machinery, 56 percent as much for crop expense and 53 percent as much for hired labor as in 1929, while taxes were reduced to 71 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $17.44 as compared with $4.30 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were more intensive and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $12.11 per acre, and fed $2,938 of feed per farm, as compared with $7.21 invested per acre, and $1,730 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $139 for each $100 of feed fed, as compared with a return of $113 per $100 of feed fed on the least profitable farms. The most profitable farms had an average of 12.2 litters per farm, weaned an average of 6.3 pigs per litter, and had an income of $114 per litter. The comparable figures for the least profitable farms were 7.9 litters per farm, 5.7 pigs weaned per litter, and an income of $84 per litter. The most profitable farms had an average investment in cattle of $1,781 per farm, and had returns of $133 per $100 invested in cattle, as compared with an average investment in cattle of $1,016 per farm, and returns of $107 per $100 invested in cattle on the least profitable farms.

The most profitable farms, although only 3.4 acres larger in size, had a larger proportion of their land area tillable, and had 12.4 acres more corn, 5.3 acres more oats, 16.3 acres more soybeans and 5.7 acres more hay than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. In addition to the larger acreage of crops, another reason for the larger inventories of feed and grain was the higher crop yields, there being an advantage of 12.0 bushels of corn, 2.8 bushels of oats, and 11.6 bushels of soybeans per acre in favor of the high-profit group.

The larger income on the most profitable farms was secured with a total operating cost of only $1.06 an acre greater than on the least profitable farms. Man labor cost per crop acre was $5.86 on the most profitable farms as compared with $6.07 on the least profitable group, while power and machinery costs per crop acre was $3.87 on the most profitable group, and $4.62 per crop acre on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	23	$136	5	$ 89	22	$178	$325
1/3 least profitable farms	18	78	3	118	17	88	141
All accounting farms	63	109	8	100	60	139	231

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $3 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 15.8 contracted acres which were used as follows: 4.3 idle; 3.4 red clover; 1.8 sweet clover; 2.7 soybeans; 1.2 alfalfa; and 2.4 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 68
Lee, Whiteside, and Ogle County Farms in 1934

Items	Your farm	Average of 68 farms	23 most profitable farms	23 least profitable farms
Size of farms--acres		205.0	204.7	201.3
Percent of land area tillable		85.3	87.1	80.8
Percent of tillable land in hay and pasture		38.0	39.2	37.0
Gross receipts per acre		19.06	26.99	12.79
Total expenses per acre		8.87	9.55	8.49
Net receipts per acre		10.19	17.44	4.30
Value of land per acre		98	96	104
Total investment per acre		149	152	150
Acres in Corn		49.1	54.5	42.1
Oats		32.2	34.0	28.7
Soybeans		2.0	19.3	3.0
Hay		30.6	33.2	27.5
Tillable pasture		35.9	36.7	32.6
Crop yields--Corn, bu. per acre		39.6	47.0	35.0
Oats, bu. per acre		10.3	11.8	9.0
Soybeans, bu. per acre		10.1	17.4	5.8
Value of feed fed to productive L.S.		2 308	2 938	1 730
Returns per $100 of feed fed to productive livestock		129	139	113
Returns per $100 invested in:				
Cattle		116	133	107
Poultry		213	191	226
Litters per farm		10.2	12.2	7.9
Pigs weaned per litter		6.1	6.3	5.7
Income per litter farrowed		103	114	84
Dairy sales per dairy cow		59	57	63
Investment in productive L.S. per A.		9.64	12.11	7.21
Receipts from productive L.S. per A.		14.52	19.98	9.75
Man labor cost per crop acre		5.76	5.86	6.07
Machinery cost per crop acre		2.46	2.54	2.59
Power and mach. cost per crop A.		3.96	3.87	4.62
Farms with tractor		64.7%	69.6%	47.8%
Value of feed fed to horses		231	242	264
Man labor cost per $100 gross income		21	15	31
Expenses per $100 gross income		47	35	66
Farm improvements cost per acre		1.12	1.30	.87
Excess of sales over cash expenses		2 056	3 311	1 359
Increase in inventory		692	953	162
Rate earned on investment		6.86	11.46	2.87
Gross receipts per farm		3 907	5 525	2 575

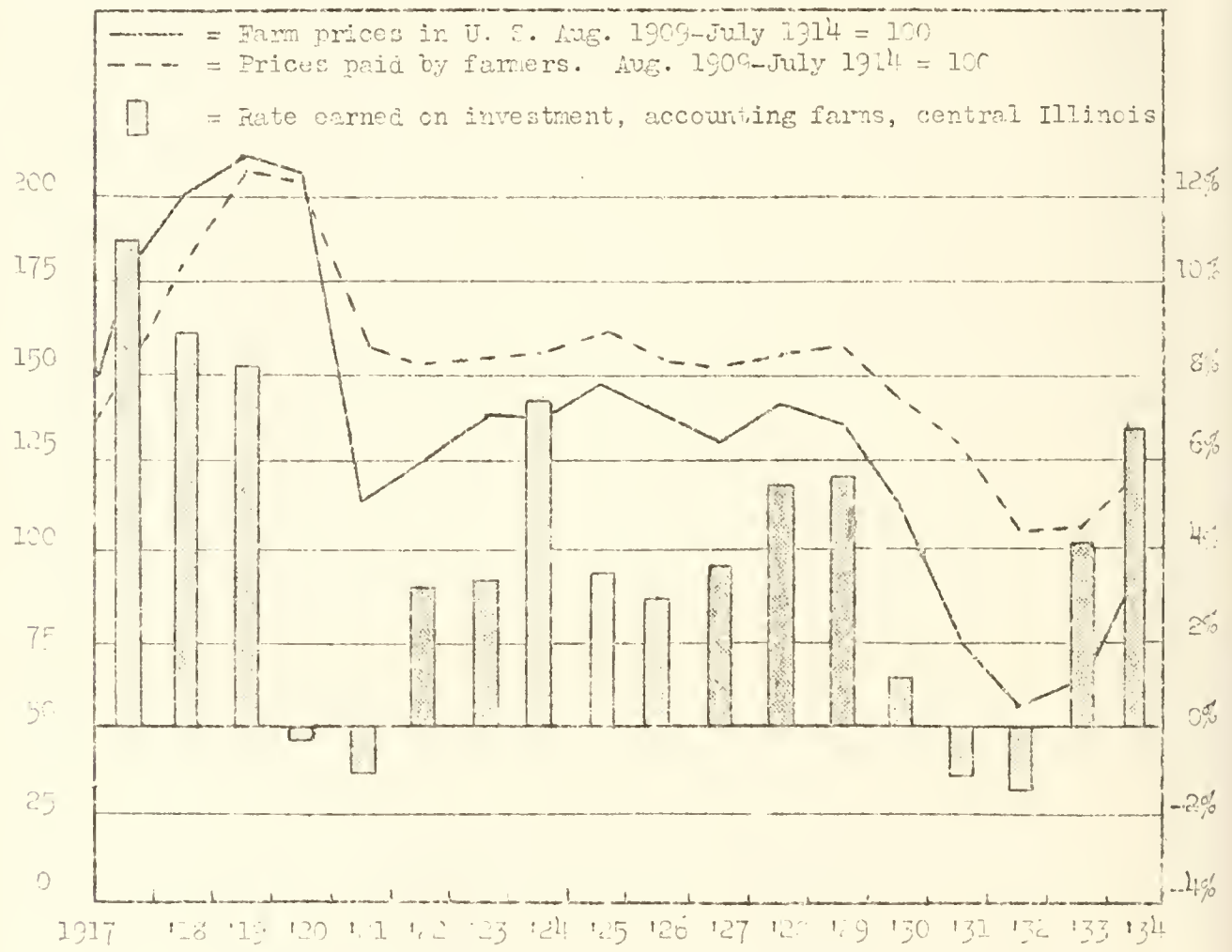
Chart for Studying the Efficiency of Various Parts of Your Business,
Lee, Whiteside, and Ogle Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 68 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factory, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Cattle income per $100 invested	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
14.5	60	20	166	153	89	388	199	.75	.25	--	4200	4050	29.00	8900	355
13.0	56	18	156	143	83	353	185	1.75	1.00	--	3500	3650	27.00	7900	325
11.5	52	16	146	133	77	318	171	2.75	1.75	3	2800	3250	25.00	6900	295
10.0	48	14	136	123	71	283	157	3.75	2.50	9	2100	2850	23.00	5900	265
8.5	44	12	126	113	65	248	143	4.75	3.25	15	1400	2450	21.00	4900	235
6.86	39.6	10.3	116	103	59	213	129	5.76	3.96	21	692	2056	19.06	3907	205
5.5	36	8	106	93	53	178	115	6.75	4.75	27	0	1650	17.00	2900	175
4.0	32	6	96	83	47	143	101	7.75	5.50	33	-700	1250	15.00	1900	145
2.5	28	4	86	73	41	108	87	8.75	6.25	39	-1400	850	13.00	900	115
1.0	24	2	76	63	35	73	73	9.75	7.00	45	--	450	11.00	--	85
-.5	20	0	66	53	29	38	59	10.75	7.75	51	--	50	9.00	--	55

Influence of Price Changes on Farm Earnings

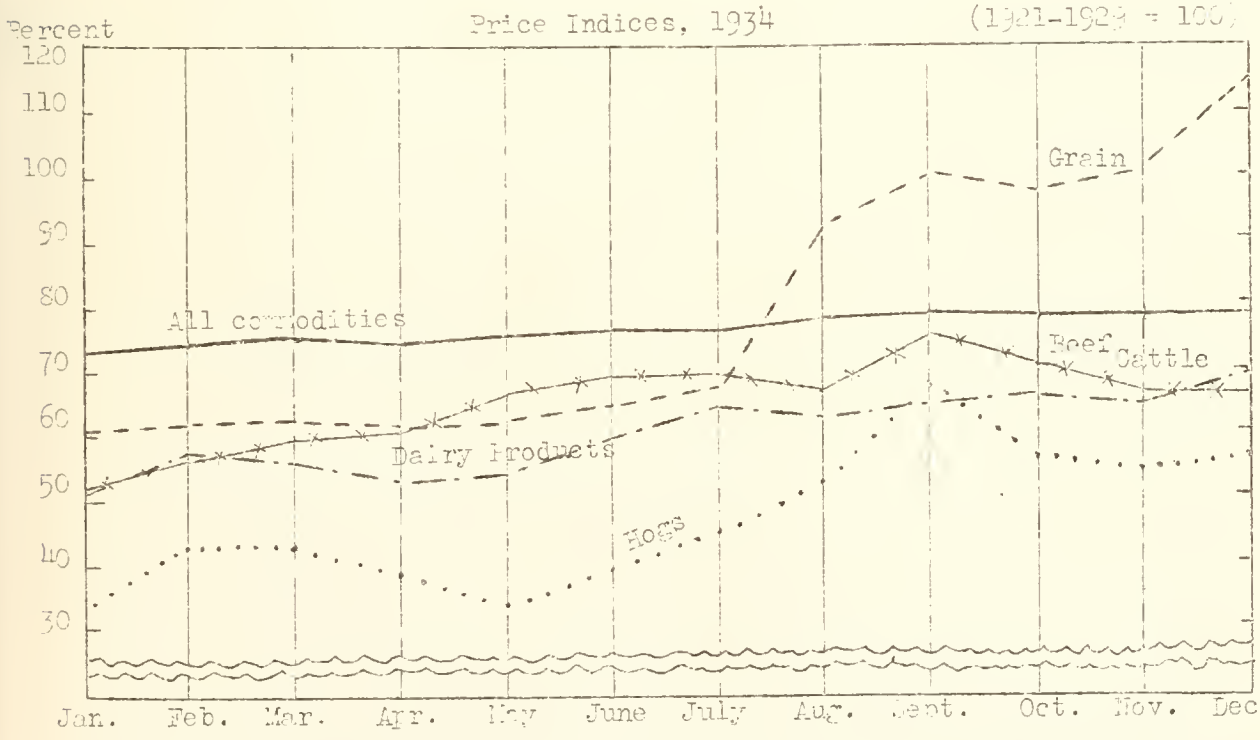
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.80 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Lee, Whiteside, and Ogle counties for the last five years is very interesting because of the violent changes in the price level. 1934 was a year of low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 80 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best these counties have experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiecny the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Lee, Whiteside, and Ogle Counties for 1930-1934

Items	1930 1/	1931 2/	1932 2/	1933 2/	1934
Number of farms	55	37	36	33	68
Average size of farms, acres	206	232	225	225	205
Average rate earned, to pay for management, risk and capital	2.8%	-1.9%	-1.7%	-4.3%	6.9%
Average labor and management wage	$-72	$-2 148	$-1 768	$297	$1 084
Gross income per acre	18.15	9.13	7.86	14.87	19.06
Operating cost per acre	12.94	12.41	10.47	8.61	8.87
Average value of land per acre	113	98	98	98	98
Total investment per acre	183	172	152	145	149
Investment per farm in:					
Total livestock	4 293	4 118	3 010	2 471	2 237
Cattle	2 652	2 586	1 913	1 584	1 362
Hogs	812	808	477	329	330
Poultry	173	139	102	87	85
Gross income per farm	3 740	2 115	1 771	3 350	3 907
Income per farm from:					
Crops	---	---	---	1 315	820
Miscellaneous	64	42	26	25	8
Total livestock	3 676	2 073	1 745	2 010	2 999
Cattle	691	564	631	725	1 152
Dairy sales	1 158	520	370	400	492
Hogs	1 548	757	542	659	1 043
Poultry	239	207	140	152	~~73~~ 187
Average yield of corn in bu.	41	49	58	52	40
Average yield of oats in bu.	49	44	49	35	10

1/ Records from Stephenson county included for 1930.
2/ Records from Ogle and Lee Counties only for 1931, 1932, 1933.

ANNUAL FARM BUSINESS REPORT ON FORTY-THREE FARMS IN MERCER COUNTY, ILLINOIS, 1934

P. E. Johnston, E. L. Sauer, and J. B. Andrews*

The farm earnings of 43 account-keeping farmers in Mercer County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 43 accounts show for 1934 an average net income of $2,471 per farm, as compared with an average of $1,988 in 1933, and an average net loss of $481 in 1932. The average cash income in 1934 was $5 303 per farm, the cash business expenditures $3,057 per farm, leaving a cash balance of $2,246 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $857 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,103 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* W. F. Purnell, farm adviser in Mercer County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 43 accounting farms the most successful third shows an average net income of $4,123, while the average net income of the least successful third of the farms was only $919. In 1933 the comparable net incomes for the two groups was $2,883, and $1,245 respectively.

Investments, Receipts, Expenses and Earnings on 43
Mercer County Farms in 1934

Items	Your farm	Average of 43 farms	14 most profitable farms	14 least profitable farms
CAPITAL INVESTMENTS				
Land		22 801	23 190	23 639
Farm improvements		4 385	4 508	4 400
Livestock total		2 588	3 312	2 358
Horses		419	410	464
Cattle		1 395	2 001	1 118
Hogs		615	690	612
Sheep		92	131	98
Poultry		67	80	66
Machinery and equipment		1 322	1 229	1 416
Feed and grains		1 852	2 525	1 389
Total capital investment	$	$32 948	$34 764	$33 202
RECEIPTS AND NET INCREASES				
Livestock total		4 371	5 988	3 168
Horses		40	48	7
Cattle		1 396	2 059	934
Hogs (including AAA payments)		2 373	3 159	1 753
Sheep		67	61	76
Poultry		95	151	85
Egg sales		100	146	76
Dairy sales		300	364	237
Feed and grains (including AAA payments)		---	126	---
Labor off farm		78	65	22
Miscellaneous receipts		23	66	---
Total receipts & net increases	$	$ 4 472	$ 6 245	$ 3 190
EXPENSES AND NET DECREASES				
Farm improvements		263	239	325
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		368	413	366
Feed and grains		73	---	373
Livestock expense		48	62	40
Crop expense		122	170	109
Hired labor		224	311	158
Taxes		245	278	225
Miscellaneous expenses		26	29	26
Total expenses & net decreases	$	$ 1 369	$ 1 502	$ 1 622
RECEIPTS LESS EXPENSES	$	$ 3 103	$ 4 743	$ 1 568
Total unpaid labor		632	620	649
Operator's labor		524	540	492
Family labor		108	80	157
Net income from investment and management		2 471	4 123	919
RATE EARNED ON INVESTMENT	%	7.50%	11.86%	2.77%
Return to capital and operator's labor and management		2 995	4 663	1 411
5% of capital invested		1 647	1 738	1 660
LABOR AND MANAGEMENT WAGE	$	$ 1 348	$ 2 925	$ -249

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$21 and over	3	$9	8
19	2	7	3
17	1	5	2
15	7	3	2
13	6	1	3
11	5	-1	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes, with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 275 acres each, the least successful 217 acres each. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sale of hogs, cattle, and feed and grains accounts for most of the difference in income between the two groups. The most successful farms had less total expense per farm, and per acre, including the charge for family labor, than the least successful farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	3 263	1 836
Average of 14 most successful farms	4 608	3 034
Average of 14 least successful farms	2 353	895
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and at the end of the year. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Mercer County was $857 in 1934, as compared with $799 in 1933, and an inventory loss of $1,222 per farm in 1932. There were increases of $496 in total livestock, and $519 in feed and grain, and decreases of $20 in machinery and $138 in improvements. The decrease in machinery was the smallest it has been since 1930, indicating that more of the necessary repairs and replacements are being made, but still not enough to offset the depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 588	$3 084	$ 496	$
Feed and grains	1 852	2 371	519	
Machinery	1 322	1 302	-20	
Improvements (except residence)	4 385	4 247	-138	
Total	$10 147	$11 004	$ 857	$

Some Adjustments on Mercer County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. In 1934 total operating expenses were 28 cents an acre higher than in 1933, while cash operating expenses were $3,057 per farm in 1934, as compared with $3,098 per farm in 1933. There were decreases in expenditures from the previous year for livestock, labor, and taxes, which more than offset the increase in expenditures for feed, crop expense, improvements, and machinery Indications point to an expansion of spending for 1935, particularly for machinery and improvements, since farmers have postponed replacements and repairs of these items during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Mercer County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 580	$2 283	$	$4 455	$8 666
Feed and grains		1 255	1 762		663	1 075
Machinery		424	806		76	153
Improvements		133	219		8	2
Labor		224	574		78	34
Miscellaneous		26	34		23	5
Livestock expense		48	82		---	---
Crop expense		122	193		---	---
Taxes		245	376		---	---
Total	$	$3 057	$6 329	$	$5 303	$9 935
Excess of cash sales over expenses				$	$2 246	$3 606
Increase in inventory					857	643
Income to labor and capital (Receipts less expenses)					3 103	4 249

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 53 percent of that in 1929 cash expenditures were only 48 percent as large. In 1934 livestock purchases were 25 percent, and feed and grain purchases 71 percent as large as in 1929. In 1934 these farms paid out 53 percent as much for machinery, and 63 percent as much for crop expense as in 1929, while taxes were reduced to 65 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $15.01, as compared with $4.23 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms averaged 57.5 acres larger, and had a larger proportion of their land area tillable than the least profitable farms. They had 17.7 acres more corn, 2.7 acres more oats, 5.7 acres more hay, and 26.2 acres more tillable pasture than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. The most profitable farms also produced 10.9 bushels more corn, and 3.5 bushels more oats than the least profitable farms.

The most profitable farms had more livestock, and were more efficient in their livestock operations than the least profitable farms. The most profitable farms had an investment of $11.87 an acre in productive livestock, as compared with an investment of $9.43 an acre on the least profitable farms. The most profitable farms fed $4,419 worth of feed to productive livestock, securing a return of $134 for each $100 worth of feed fed, while the least profitable farms fed $2,586 worth of feed, and secured $122 for each $100 worth of feed fed.

The larger income on the most profitable farms was secured with a total operating cost of $7.72 per acre, as compared with $10.46 per acre on the least profitable farms. Man labor costs per crop acre were $6.15 on the most profitable farms, as compared with $6.87 for the least profitable farms. Power and machinery costs per crop acre amounted to $4.29 on the most profitable farms, and $4.80 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	14	$166	2	$43	14	$300	$378
1/3 least profitable farms	14	110	0	---	14	225	334
All accounting farms	43	126	3	35	43	258	386

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $141 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 20.3 contracted acres which were used as follows: 4.2 idle; 2.3 mixed clover; 1.6 sweet clover; 8.7 soybeans; .7 alfalfa; and 2.8 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program, there would have been but little corn in the hands of farmers at the time the major price advance became effective.

-3-

Factors Helping to Analyze the Farm Business on 43 Mercer County Farms in 1934

Items	Your farm	Average of 43 farms	14 most profitable farms	14 least profitable farms
Size of farms--acres	____	221.5	274.7	217.2
Percent of land area tillabel	____	76.8	76.6	70.8
Percent of tillable land in hay and pasture	____	51.2	51.7	50.0
Gross receipts per acre	____	20.19	22.73	14.69
Total expenses per acre	____	9.03	7.72	10.46
Net receipts per acre	____	11.16	15.01	4.23
Value of land per acre	____	103	84	109
Total investment per acre	____	149	127	153
Acres in Corn	____	53.3	66.9	49.2
Oats	____	22.2	24.6	20.9
Soybeans	____	1.5	2.7	1.8
Hay	____	35.7	43.1	37.4
Tillable pasture	____	51.4	65.7	39.5
Crop yields--Corn, bu. per acre	____	36.1	39.3	28.4
Oats, bu. per acre	____	4.8	5.7	2.2
Value of feed fed to productive L.S.	____	3 291	4 419	2 586
Returns per $100 of feed fed to productive livestock	____	132	134	122
Returns per $100 invested in:				
Cattle	____	117	115	101
Poultry	____	232	250	212
Pigs weaned per litter	____	6.0	6.1	5.9
Income per litter farrowed	____	104	101	99
Dairy sales per dairy cow	____	43	41	46
Investment in productive L.S. per A.	____	10.86	11.87	9.43
Receipts from productive L.S. per A.	____	19.55	21.62	14.55
Man labor cost per crop acre	____	6.79	6.15	6.87
Machinery cost per crop acre	____	3.10	2.85	3.20
Power and mach. cost per crop A.	____	4.55	4.29	4.80
Farms with tractor	____	58%	64%	57%
Value of feed fed to horses	____	212	256	190
Man labor cost per $100 gross income	____	18	14	25
Expenses per $100 gross income	____	45	34	71
Farm improvements cost per acre	____	1.19	.87	1.50
Excess of sales over cash expenses	____	2 246	2 897	1 548
Increase in inventory	____	857	1 846	20
Rate earned on investment	____	7.50%	11.86%	2.77%
Gross receipts per farm	____	4 472	6 245	3 190

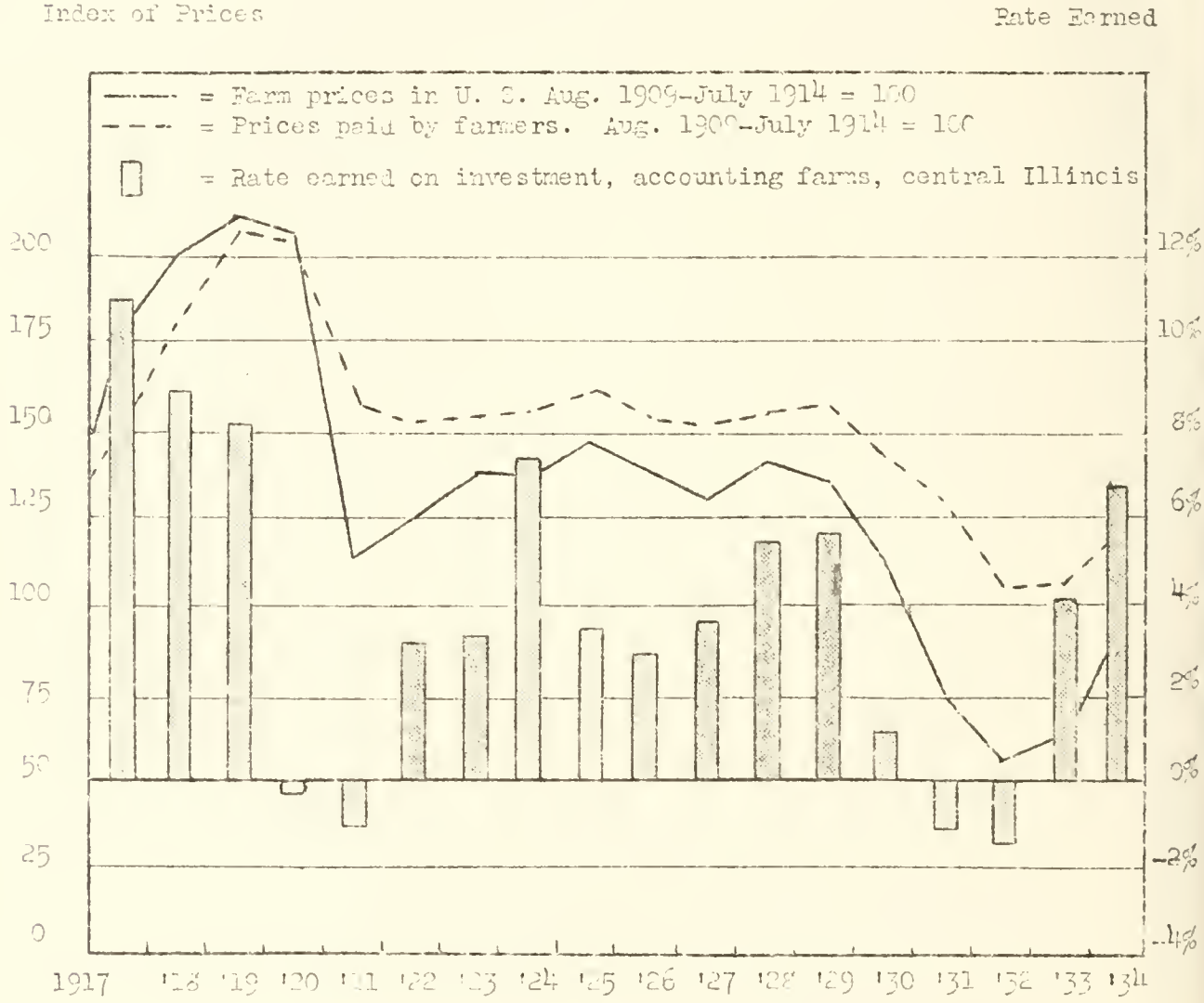
Chart for Studying the Efficiency of Various Parts of Your Business.
Mercer County, 1934

The numbers above the lines across the middle of the page are the averages for the 43 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Cattle income per $100 invested	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	U.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
16.0	61	15	292	179	78	382	307	1.79	--	--	3857	6246	45	9500	470
14.3	56	13	257	164	71	352	272	2.79	.55	--	3257	4846	40	8500	420
12.6	51	11	222	140	64	322	237	3.79	1.55	--	2657	4646	35	7500	370
10.9	46	9	187	134	57	292	202	4.79	2.55	2	2057	3846	30	6500	320
9.2	41	7	152	119	50	262	167	5.79	3.55	10	1457	3046	25	5500	270
7.5	36.1	4.8	117	104	43	232	132	6.79	4.55	18	857	2246	20.19	4472	221.5
5.8	31	3	82	89	36	202	97	7.79	5.55	26	257	1446	15	3500	170
4.1	26	1	47	74	29	172	62	8.79	6.55	34	-343	646	10	2500	120
2.4	21	--	12	59	22	142	27	9.79	7.55	42	-943	--	5	1500	70
.7	16	--	--	44	15	112	--	10.79	8.55	50	-1543	--	--	500	20
-1.0	11	--	--	29	8	82	--	11.79	9.55	58	-2143	--	--	--	--

Influence of Price Changes on Farm Earnings

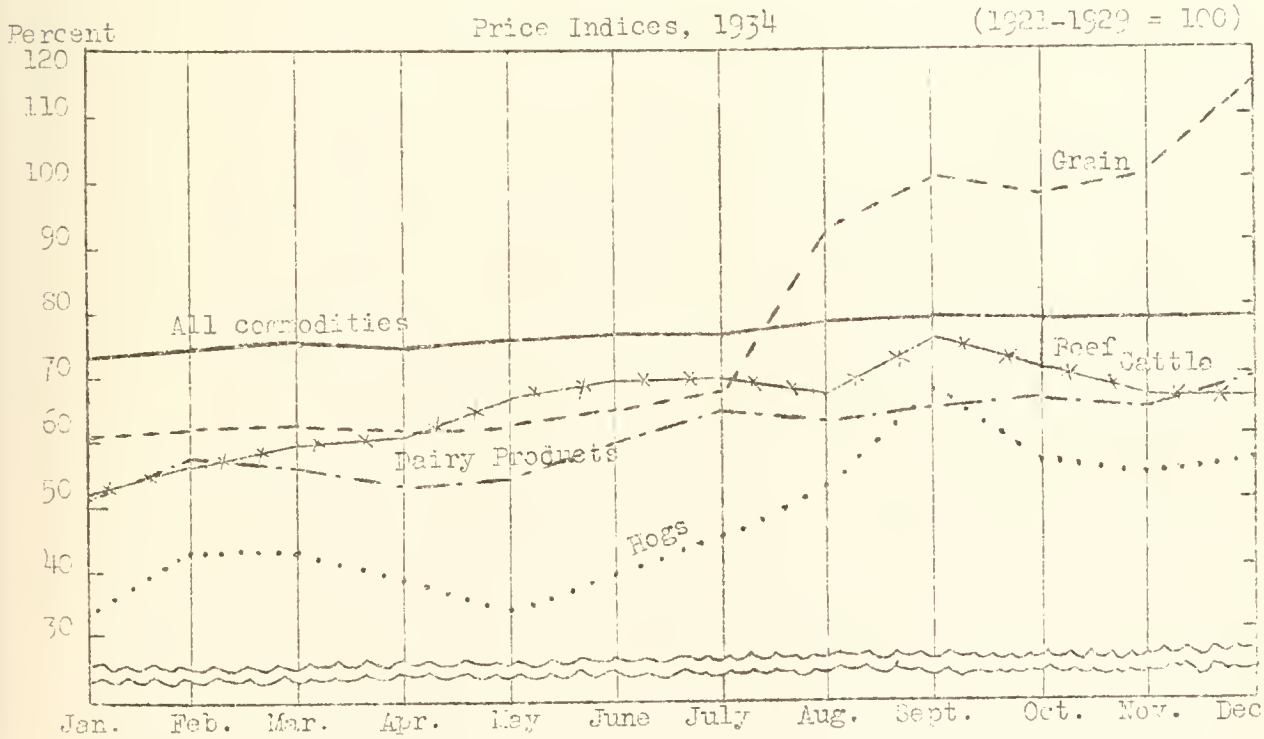
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Mercer County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure and followed the smaller than average crop of 1933, the increased prices of both grain and livestock caused the 1934 earnings to be the highest for the five-year period 1930-1934.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Mercer County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	40	46	44	36	43
Average size of farms, acres	260	240	240	244	222
Average rate earned, to pay for management, risk and capital	2.1%	-2.8%	-1.2%	5.5%	7.5%
Average labor and management wage	$-774	$-2 969	$-142	$706	$1 348
Gross income per acre	20.68	11.74	10.54	16.90	20.19
Operating cost per acre	16.34	17.09	12.54	8.75	9.03
Average value of land per acre	138	129	111	102	103
Total investment per acre	202	190	162	147	149
Investment per farm in:					
Total livestock	5 416	4 296	3 228	2 967	2 588
Cattle	2 640	1 665	1 618	1 565	1 395
Hogs	1 860	1 872	988	746	615
Poultry	149	130	98	80	67
Gross income per farm	5 374	2 815	2 534	4 125	4 472
Income per farm from:					
Crops	---	---	---	746	---
Miscellaneous income	35	44	33	35	25
Total livestock	5 339	2 771	2 501	3 344	4 371
Cattle	1 156	490	868	1 047	1 396
Dairy sales	333	197	211	231	300
Hogs	3 578	1 872	1 229	1 831	2 373
Poultry	238	174	149	114	195
Average yield of corn in bu.	49	51	60	53	36
Average yield of oats in bu.	41	39	45	36	5

ANNUAL FARM BUSINESS REPORT ON FORTY FARMS IN HENDERSON COUNTY, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and J. Ackerman*

The farm earnings of 40 account-keeping farmers in Henderson County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 40 accounts show for 1934 an average net income of $1,639 per farm, as compared with an average of $1,553 in 1933 and an average net loss of $586 in 1932. The average cash income in 1934 was $3,171 per farm, the cash business expenditures $1,488 per farm, leaving a cash balance of $1,683 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $629 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,312 per farm. The inventory increase was a smaller part of the total farm income in 1934 than in 1933

These data must not be considered representative of average farm conditions for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* G. B. Whitman, farm adviser in Henderson County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand, the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 40 accounting farms the most successful third shows an average net income of $2,499, while the average net income of the least successful third of the farms was only $724. In 1933 the comparable net incomes for the two groups was $2,549, and $726 respectively.

Investments, Receipts, Expenses and Earnings on 40 Henderson County Farms in 1934

Items	Your farm	Average of 40 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		14 599	13 253	14 661
Farm improvements		3 022	2 237	3 556
Livestock total		1 506	1 276	1 639
Horses		322	322	358
Cattle		654	538	541
Hogs		384	348	447
Sheep		92	18	235
Poultry		54	50	58
Machinery and equipment		931	919	969
Feed and grains		1 219	1 351	1 144
Total capital investment	$	$21 277	$19 036	$21 969
RECEIPTS AND NET INCREASES				
Livestock total		2 048	2 175	1 975
Horses		42	33	54
Cattle		442	462	426
Hogs (including AAA payments)		1 213	1 348	1 096
Sheep		61	30	120
Poultry		63	70	64
Egg sales		48	46	46
Dairy sales		179	186	169
Feed and grains (including AAA payments)		1 048	1 920	108
Labor off farm		71	71	49
Miscellaneous receipts		1	3	1
Total receipts & net increases	$	$ 3 168	$ 4 169	$ 2 133
EXPENSES AND NET DECREASES				
Farm improvements		139	145	126
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		234	267	206
Feed and grains		---	---	---
Livestock expense		31	26	45
Crop expense		109	153	71
Hired labor		100	124	83
Taxes		218	267	182
Miscellaneous expenses		25	24	25
Total expenses & net decreases	$	$ 856	$ 1 006	$ 738
RECEIPTS LESS EXPENSES	$	$ 2 312	$ 3 163	$ 1 395
Total unpaid labor		673	664	671
Operator's labor		540	540	540
Family labor		133	124	131
Net income from investment and management		1 639	2 499	724
RATE EARNED ON INVESTMENT	%	7.70%	13.13%	3.30%
Return to capital and operator's labor and management		2 179	3 039	1 264
% of capital invested		1 064	952	1 098
LABOR AND MANAGEMENT WAGE	$	$ 1 115	$ 2 087	$ 166

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19	1	$7	5
17	2	5	8
15	0	3	1
13	3	1	2
11	2	-1	3
9	13		

A further study of the farm businesses, made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 230 acres each, the least successful 171 acres each. The most profitable farms, while having a larger investment in feed and grains, had a smaller total investment than either the least successful group or the average of all accounting farms. Despite their smaller total investment, the most profitable farms had a larger income than the least successful farms, due chiefly to their larger returns from feed and grains and hogs. Although the total expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it eas on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the yar than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 168	1 320
Average of 13 most successful farms	2 592	2 155
Average of 13 least successful farms	2 022	631
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and and of the year. This difference accounts for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Henderson County was $629 in 1934, as compared with $1,003 in 1933, and an inventroy loss of $811 a farm in 1932. There were increases of $150 in total livestock, $499 in feed and grain, and $62 in machinery, while improvements showed a decrease of $82. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 506	$1 656	$150	$
Feed and grains	1 219	1 718	499	
Machinery	931	993	62	
Improvements (except residence)	3 022	2 940	-82	
Total	$6 678	$7 307	$629	$

Some Adjustments on Henderson County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 36 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,488 a farm in 1934, as compared with $1,538 in 1933. There were significant increases in expendiutres over the previous year for machinery, feed and grain, and crop expenses, and significant decreases in expendiutres for livestock, taxes, and labor. Indications point to an expansion of spending for repairs and replacements for machinery and improvements in 1935, since farmers have postponed purchase of these items during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Henderson County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 329	$1 258	$	$2 227	$5 488
Feed and grains		287	808		836	1 395
Machinery		332	739		36	135
Improvements		57	182		---	5
Labor		100	472		71	59
Miscellaneous		25	33		1	2
Livestock expense		31	44		---	---
Crop expense		109	222		---	---
Taxes		218	363		---	---
Total	$	$1 488	$4 121	$	$3 171	$7 084
Excess of cash sales over expenses				$	$1 683	$2 963
Increase in inventory					629	480
Income to labor and capital (Receipts less expenses)					2 312	3 443

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 45 percent of that in 1929, cash expenditures were only 36 percent as large. In 1934 livestock purchases were 26 percent, and feed and grain purchases 36 percent as large as in 1929. In 1934 these farms paid out 45 percent as much for machinery, 31 percent as much for improvements, and 49 percent as much for crop expense as in 1929, while taxes were reduced to 60 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $10.89, as compared with $4.23 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were 58.2 acres larger, and had 23.4 acres more corn, 7.5 acres more oats, and 6.2 acres more tillable pasture than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. In addition to the larger acreage of crops, another reason for the larger inventories of feed and grain was the higher crop yields, there being an advantage of 8.5 bushels of corn, 2.0 bushels of oats, and 3.6 bushels of soybeans per acre in favor of the high-profit group. Because of small acreages and low yields, the least profitable farms had an inventory loss of $174 in the feed and grain account, in spite of the price advance.

The most profitable farms had a smaller total livestock investment, but they were more efficient in their livestock operations than the least profitable farms. They had an investment of $4.74 an acre in productive livestock, as compared with an investment of $7.59 an acre on the least profitable farms. The most profitable farms fed $1,516 worth of feed to productive livestock, securing a return of $141 for each $100 worth of feed fed, while the least profitable farms fed $1,713 worth of feed, and secured a return of $112 for each $100 worth of feed fed.

The larger income on the most profitable farms was secured with a total operating cost of $7.28 per acre, as compared with $8.23 per acre for the least profitable farms. The man labor costs were $5.15 per crop acre on the most profitable farms, as compared with $6.59 on the least profitable farms, while power and machinery costs per crop acre amounted to $2.96 on the most profitable farms, and $3.28 on the least profitable farms.

Influences of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	13	$143	1	$254	13	$181	$344
1/3 least profitable farms	13	101	-	---	13	143	244
All accounting farms	40	116	2	176	40	164	289

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $71 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 18.7 contracted acres which were used as follows: 3.9 idle; 7.2 mixed clover and timothy; 1.3 sweet clover; 3.3 soybeans; 0.9 alfalfa; and 2.1 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were, on many farms, the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 40 Henderson County Farms in 1934

Items	Your farm	Average of 40 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		205.3	229.5	171.3
Percent of land area tillable		78.2	79.0	79.0
Percent of tillable land in hay and pasture		35.1	32.3	37.9
Gross receipts per acre		15.43	18.17	12.46
Total expenses per acre		7.45	7.28	8.23
Net receipts per acre		7.98	10.89	4.23
Value of land per acre		71	58	86
Total investment per acre		104	83	128
Acres in Corn		55.3	68.3	44.9
Oats		29.4	33.9	26.4
Wheat		3.6	5.5	.9
Soybeans		6.1	3.9	4.7
Hay		22.6	24.0	23.0
Tillable pasture		33.7	34.5	28.3
Crop yields--Corn, bu. per acre		27.8	30.6	22.1
Oats, bu. per acre		5.7	6.9	4.9
Soybeans, bu. per acre		17.1	18.9	15.3
Value of feed fed to productive L.S.		1 576	1 516	1 713
Returns per $100 of feed fed to productive livestock		127	141	112
Returns per $100 invested in:				
Cattle		94	111	104
Poultry		191	207	180
Pigs weaned per litter		5.7	5.5	6.0
Income per litter farrowed		93	96	95
Dairy sales per dairy cow		37	43	42
Investment in productive L.S. per A.		6.08	4.74	7.59
Receipts from productive L.S. per A.		9.77	9.33	11.21
Man labor cost per crop acre		5.92	5.15	6.59
Machinery cost per crop acre		1.85	1.82	1.93
Power and mach. cost per crop A.		3.04	2.96	3.28
Farms with tractor		52%	69%	31%
Value of feed fed to horses		193	200	199
Man labor cost per $100 gross income		24	18	33
Expenses per $100 gross income		48	40	66
Farm improvements cost per acre		.68	.63	.74
Excess of sales over cash expenses		1 683	1 819	1 537
Increase in inventory		629	1 344	-142
Rate earned on investment		7.70%	13.13%	3.30%
Gross receipts per farm		3 168	4 169	2 133

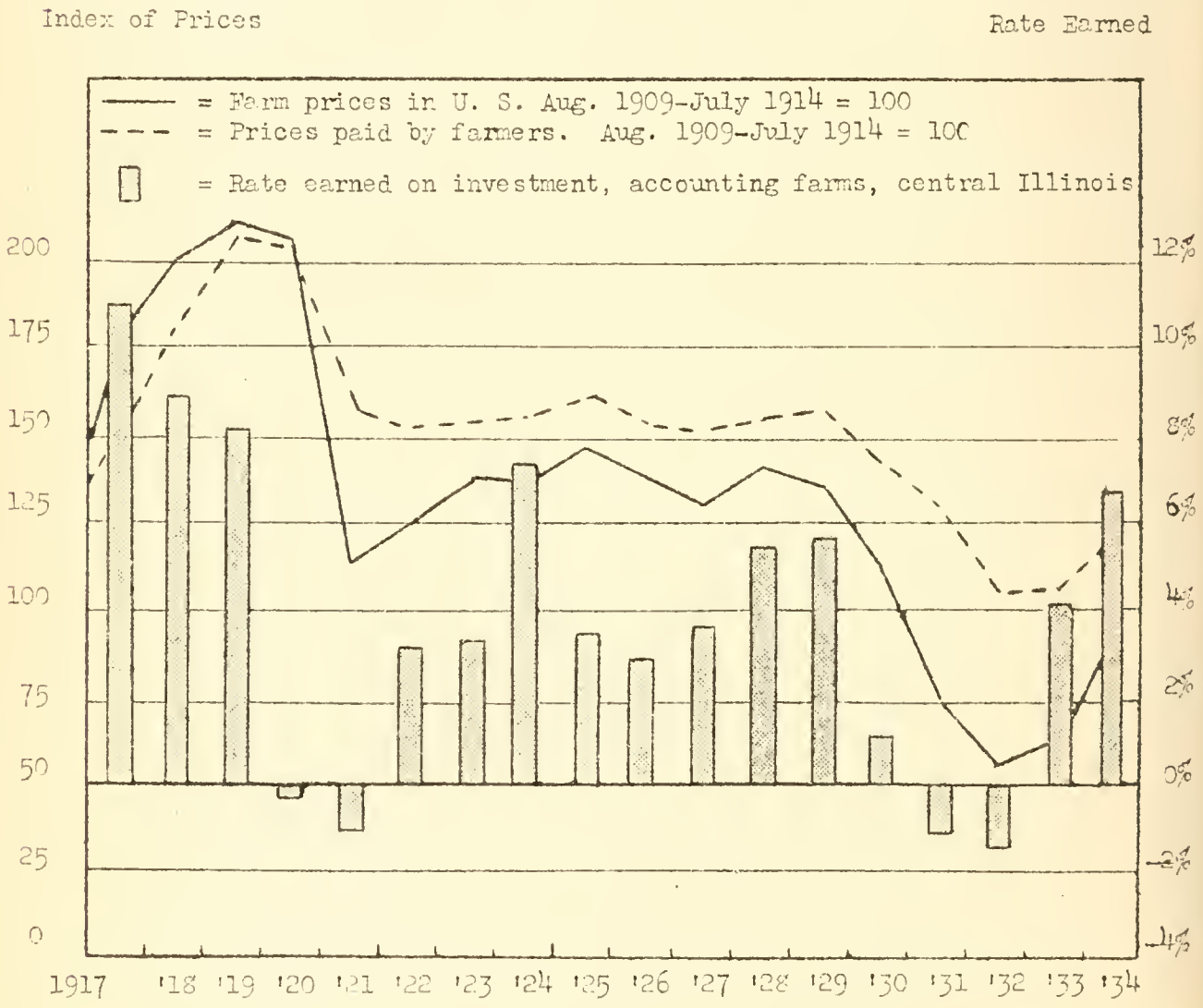
Chart for Stuyding the Efficiency of Various Parts of Your Business,
Henderson County, 1934

The numbers above the lines across the middle of the page are the averages for the 40 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
16.2	43	16	27	143	62	366	192	1.00	--	--	2600	4200	28.00	6200	400
14.5	40	14	25	133	57	331	179	2.00	0	0	2200	3700	25.50	5600	360
12.8	37	12	23	123	52	296	166	3.00	.75	6	1800	3200	23.00	5000	320
11.1	34	10	21	113	47	261	153	4.00	1.50	12	1400	2700	20.50	4400	280
9.4	31	8	19	103	42	226	140	5.00	2.25	18	1000	2200	18.00	3800	240
7.7	27.8	5.7	17.1	93	37	191	127	5.92	3.04	24	629	1683	15.43	3168	205.3
6.0	25	4	15	83	32	156	114	7.00	3.75	30	200	1200	13.00	2600	160
4.3	22	2	13	73	27	121	101	8.00	4.50	36	-200	700	10.50	2000	120
2.6	19	0	11	63	22	86	88	9.00	5.25	42	-600	200	8.00	1400	80
.9	16	--	9	53	17	51	75	10.00	6.00	48	-1000	-300	5.50	800	40
-.8	13	--	7	43	12	16	62	11.00	6.75	54	-1400	-800	3.00	200	--

Influence of Price Changes on Farm Earnings

Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



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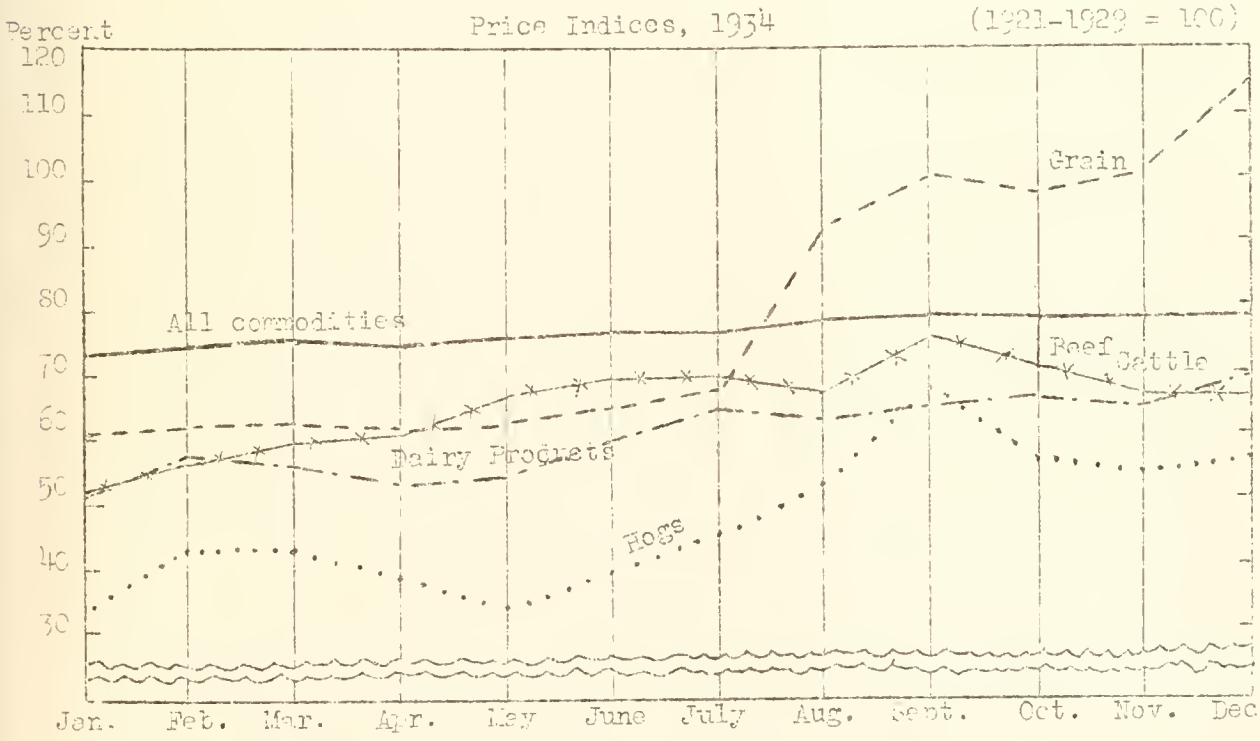

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Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Henderson County for the last five years is interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last three, and were 60 percent of the 1929 gross recetips. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Henderson County for 1929-1934

Items	1930	1931	1932	1933	1934
Number of farms	62	50	41	32	40
Average size of farms, acres	224	202	205	214.9	205
Average rate earned, to pay for management, risk and capital	2.1%	-2.7%	-2.3%	6.4%	7.70%
Average labor and management wage	$-271	$-1 555	$-1 314	$872	$1 115
Gross income per acre	13.47	7.02	5.56	14.31	15.43
Operating cost per acre	10.21	10.78	8.42	7.09	7.45
Average value of land per acre	109	95	86	83	71
Total investment per acre	153	137	123	114	104
Investment per farm in:					
Total livestock	2 898	2 458	1 919	1 709	1 506
Cattle	1 123	806	844	830	654
Hogs	1 012	1 016	521	414	384
Poultry	126	98	82	62	54
Gross income per farm	3 021	1 421	1 140	3 076	3 168
Income per farm from:					
Crops	387	---	---	1 352	1 048
Miscellaneous income	68	31	34	40	1
Total livestock	2 566	1 390	1 106	1 684	2 048
Cattle	270	181	200	328	442
Dairy sales	209	150	119	155	179
Hogs	1 940	924	693	1 045	1 213
Poultry	123	114	67	83	63
Average yield of corn in bu.	37	46	56	45	28
Average yield of oats in bu.	35	44	40	31	6

ANNUAL FARM BUSINESS REPORT ON THIRTY-SIX FARMS IN McDONOUGH COUNTY, ILLINOIS, 1934

P. E. Johnston, J. Ackerman, and T. R. Hedges*

Farm earnings on the 36 accounting farms in McDonough County averaged 5.7 percent for 1934. This is the second highest return during the past five years, while 1933 was highest, with an average return of 6.9 percent. The 1934 return is remarkable, considering the severe drouth and chinch bug damage.

These 36 accounts show for 1934 an average net income of $1,879 per farm, as compared with an average of $2,084 in 1933, and an average net loss of $347 in 1932. The average cash income in 1934 was $5,343 per farm, the cash business expenditures $3,036 per farm, leaving a cash balance of $2,307 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $221 a farm due mostly to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,523 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted, this accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*R. C. Donoghue, farm adviser in McDonough County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans was much better compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 36 accounting farms the most successful third shows an average net income of $3,515, while the average net income on the least successful third of the farms was $353. In 1933 the comparable net income for the two groups was $3,953, and $495 respectively.

Investments, Receipts, Expenses and Earnings on
36 McDonough County Farms in 1934

Items	Your farm	Average of 36 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		23 501	23 028	23 701
Farm improvements		3 758	4 014	3 315
Livestock total		2 027	2 553	1 464
Horses		348	336	323
Cattle		1 025	1 446	576
Hogs		542	600	456
Sheep		34	25	51
Poultry		78	96	58
Machinery and equipment		1 503	1 656	1 095
Feed and grains		1 969	2 627	1 382
Total capital investment	$	$32 758	$33 878	$30 957
RECEIPTS AND NET INCREASES				
Livestock total		3 500	4 765	2 032
Horses		44	63	--
Cattle		999	1 745	364
Hogs (including AAA payments)		2 002	2 502	1 268
Sheep		42	35	31
Poultry		80	76	66
Egg sales		108	176	46
Dariy sales		225	168	257
Feed and grains (including AAA payments)		265	712	65
Labor off farm		54	30	38
Miscellaneous receipts		2	1	3
Total receipts & net increases	$	$ 3 821	$ 5 508	$ 2 138
EXPENSES AND NET DECREASES				
Farm improvements		232	196	219
Horses		---	---	1
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		367	382	303
Feed and grains		---	---	---
Livestock expense		72	85	46
Crop expense		165	198	137
Hired labor		221	264	130
Taxes		207	222	178
Miscellaneous expenses		29	24	28
Total expenses & net decreases	$	$ 1 293	$ 1 371	$ 1 042
RECEIPTS LESS EXPENSES	$	$ 2 528	$ 4 137	$ 1 096
Total unpaid labor		649	622	743
Operator's labor		517	506	540
Family labor		132	116	203
Net income from investment and management		1 879	3 515	353
RATE EARNED ON INVESTMENT	%	5.73%	10.38%	1.14%
Return to capital and operator's labor and management		2 396	4 021	893
% of capital invested		1 638	1 694	1 548
LABOR AND MANAGEMENT WAGE	$	$ 758	$ 2 327	$ -655

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19 and over.	5	$7.	1
17	0	5.	6
15	2	3.	6
13	2	1.	2
11	1	-1.	1
9	7	-3 and under. . . .	3

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net income, with those having the lowest income will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 245 acres each, the least successful 209 acres. This difference in size accounts in part for the variation in the average investments, receipts, and expenses in the two groups. Difference in receipts from the sale of cattle, hogs, and grains accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	3 272	1 229
Average of 12 most successful farms . .	4 601	2 347
Average of 12 least successful farms .	2 308	242
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and at the end of the year. The rapid rise in corn price was an important factor in accounting for the difference in returns from feed and grains.

The average inventory increase for the accounting farms in McDonough County was $221, as compared with $873 in 1933, and a decrease of $789 in 1932. There were increases of $211 in feed and grain, and $86 in livestock, and decreases of $45 in improvements, and $31 in machinery. The inventory decrease in machinery and improvements was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 027	$2 113	$ 86	$
Feed and grains	1 969	2 180	211	
Machinery	1 503	1 472	-31	
Improvements (except residence)	3 758	3 713	-45	
Total	$9 257	$9 478	$221	$

Some Adjustments on McDonough County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1930 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 3 cents an acre higher in 1934 than in 1933, while cash operating expenses were $3,036 a farm in 1934 as compared with $2,174 in 1933. Low crop yields, combined with the usual large amount of livestock on McDonough County farms, necessitated the purchase of considerably more feed in 1934 than in 1933. There was also a significant increase in expenditures over 1933 for crop expense, machinery, livestock, and improvements. Indications point to an increase of expenditures for machinery and improvements in 1935, since farmers have postponed repairs and replacements for these items during the four-year period since 1930.

Cash Income and Expenses on Accounting Farms in McDonough County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 651	$1 543	$	$4 065	$6 557
Feed and grains		1 097	1 308		1 151	1 508
Machinery		405	606		69	83
Improvements		189	401		2	4
Labor		221	436		54	46
Miscellaneous		29	24		2	3
Livestock expense		72	79		---	---
Crop expense		165	266		---	---
Taxes		207	318		---	---
Total	$	$3 036	$4 981	$	$5 343	$8 201
Excess of cash sales over expenses				$	$2 307	$3 220
Increase in inventory					221	468
Income to labor and capital (Receipts less expenses)					2 528	3 688

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average cash income in 1934 was 65 percent of that in 1929, while cash expenditures were only 61 percent as large. In 1934 livestock purchases were 42 percent, and feed and grain purchases 84 percent as large as in 1929. In 1934 these farms paid out 67 percent as much for machinery, 62 percent as much for crop expense and 47 percent as much for improvements as in 1929, while taxes were reduced to 65 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $14.32, as compared with $1.68 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were larger, having 35 more crop acres and 21 more acres of corn than the least profitable farms. They also carried larger inventories of both crops and livestock on which to make a profit when prices advanced. In addition to the larger acreage of crops, the most profitable farms had higher yields, They raised 7.8 bushels more corn, and 7.3 bushels more soybeans per acre than the least profitable farms.

The most profitable farms were more intensive, and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $9.36 per acre and fed $3,810 of feed per farm. The comparable figures for the least profitable group were $5.45 per acre invested, and $1,652 of feed fed per farm. Cattle sales account for 37 percent of the livestock receipts on the most profitable farms, as compared with 18 percent on the least profitable farms. Six of the twelve farms in the most profitable group had net increases of over $1,000 from cattle, as compared with one farm in the least profitable group. Fifty percent of the $3,810 of feed fed to livestock on the most profitable farms was purchased during the year, as compared with only 21 percent for the least profitable group. The comparison between the most profitable group and the least profitable group was, therefore, as far as cattle returns are concerned, a comparison between farms specializing in cattle feeding, and farms on which mixed cattle predominated. These facts, together with the additional point that a charge for pasture is not included in feed costs as figured in this report, explain why the advantage of the most profitable group in returns per $100 of feed fed appears so slight.

Dairy and mixed cattle secure a larger proportion of their feed from pasture and are able to utilize it better than beef cattle being fattened for market. The higher returns per $100 of feed fed for the average of all farms is due to a concentration of dairy farms in the middle group. Figures for this group are not shown in this report. Cattle on the most profitable farms returned $130 per $100 invested, and $101 on the least profitable farms. The most successful farms secured an income of $113 per litter farrowed, as compared to $68 on the least successful farms.

The larger income on the most profitable farms was secured with a total operating cost of $8.12 per acre, as compared with $8.54 per acre for the least profitable farms. The man labor costs were $1.15 per crop acre lower, while power and machinery costs were 57 cents per crop acre lower for the most successful farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	12	$155	2	$176	10	$289	$425
1/3 least profitable farms	11	108	2	210	11	364	468
All accounting farms	35	136	7	204	33	292	439

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $232 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 21.8 contracted acres which were used as follows: 4.5 idle; 5.0 red clover; .3 sweet clover; 5.3 soybeans; 1.9 alfalfa; and 4.8 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
36 McDonough County Farms in 1934

Items	Your farm	Average of 36 farms	12 most profitable farms	12 least profitable farms
Size of farms--acres		237.3	245.4	209.1
Percent of land area tillable		85.7	85.1	86.1
Percent of tillable land in hay and pasture		40.0	32.5	37.7
Gross receipts per acre		16.10	22.44	10.22
Total expenses per acre		8.18	8.12	8.54
Net receipts per acre		7.92	14.32	1.68
Value of land per acre		99	94	113
Total investment per acre		138	138	148
Acres in Corn		63.5	78.4	57.0
Oats		23.2	22.7	19.0
Wheat		16.8	21.9	17.5
Soybeans		11.7	13.9	10.1
Hay		31.7	30.2	23.7
Tillable pasture		49.6	37.6	44.2
Crop yields--Corn, bu. per acre		14.9	19.2	11.4
Oats, bu. per acre		8.7	10.8	11.3
Wheat, bu. per acre		15.5	13.2	14.5
Soybeans, bu. per acre		19.9	23.3	16.5
Value of feed fed to productive L.S.		2 757	3 810	1 684
Returns per $100 of feed fed to productive livestock		125	123	121
Returns per $100 invested in:				
Cattle		119	130	101
Poultry		244	274	196
Pigs weaned per litter		6.2	6.5	5.6
Income per litter farrowed		108	113	68
Dairy sales per dairy cow		45	36	51
Investment in productive L.S. per A.		7.19	9.36	5.45
Receipts from productive L.S. per A.		14.56	19.16	9.72
Man labor cost per crop acre		5.31	5.00	6.15
Machinery cost per crop acre		2.39	2.23	2.23
Power and mach. cost per crop A.		3.51	3.10	3.67
Farms with tractor		80%	75%	75%
Value of feed fed to horses		217	211	195
Man labor cost per $100 gross income		21	16	39
Expenses per $100 gross income		51	36	83
Farm improvements cost per acre		.98	.80	1.05
Excess of sales over cash expenses		2 307	2 912	1 708
Increase in inventory		221	1 225	-612
Rate earned on investment		5.73%	10.38%	1.14%
Gross receipts per farm		3 821	5 508	2 138

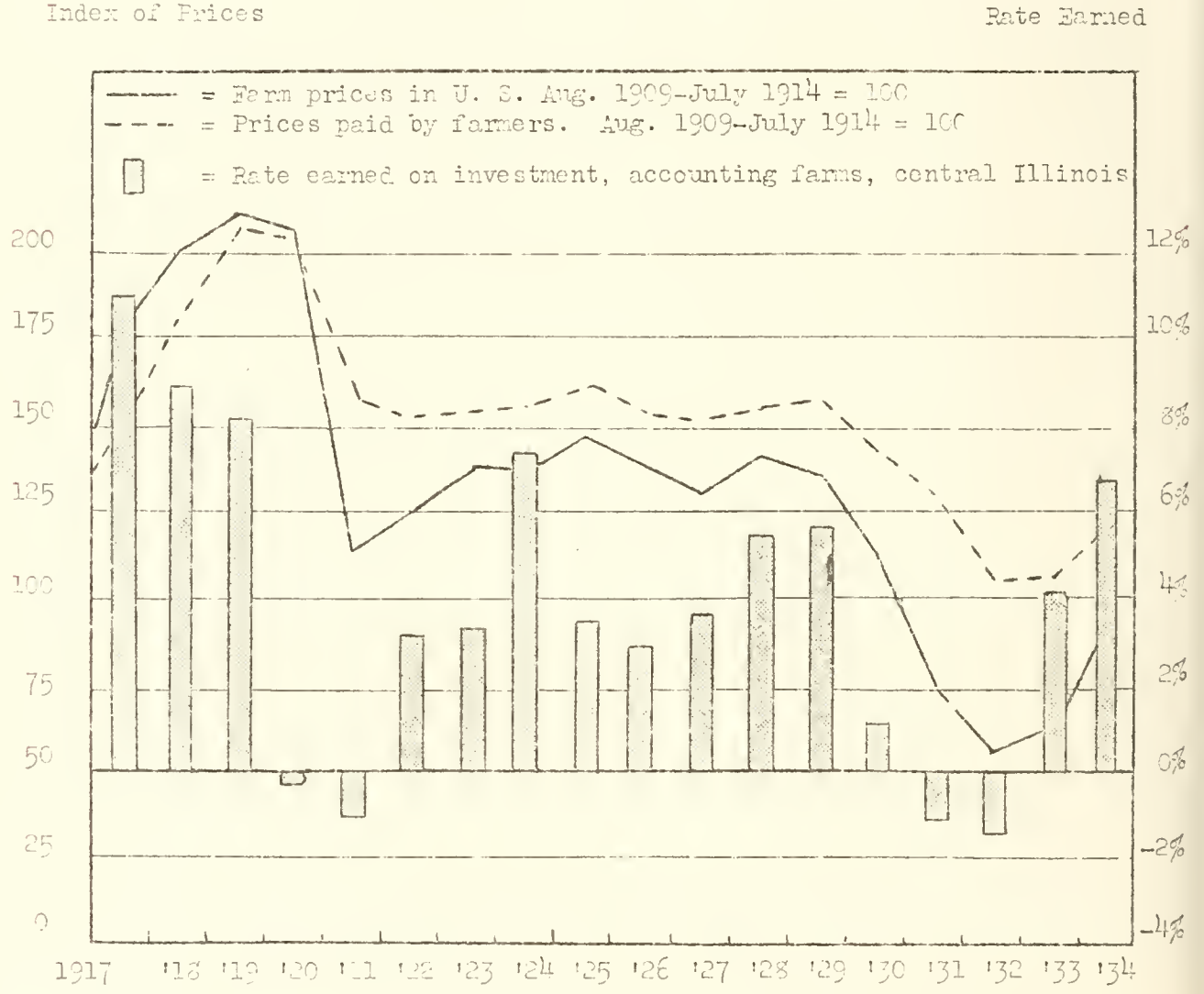
Chart for Studying the Efficiency of Various Parts of Your Business, McDonough County, 1934

The numbers above the lines across the middle of the page are the averages for the 36 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Wheat	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
15.7	30	24	26	168	70	444	196	.31	1.00	--	2721	4807	31	8800	440
13.7	27	21	24	156	65	404	182	1.31	1.50	1	2221	4307	28	7800	400
11.7	24	18	22	144	60	364	168	2.31	2.00	6	1721	3807	25	6800	360
9.7	21	15	20	132	55	324	154	3.31	2.50	11	1221	3307	22	5800	320
7.7	18	12	18	120	50	284	140	4.31	3.00	16	721	2807	19	4800	280
5.73	14.9	8.7	15.5	108	45	244	126	5.31	3.51	21	.221	2307	16.10	3821	237.3
3.7	12	6	14	96	40	204	112	6.31	4.00	26	-279	1807	13	2800	200
1.7	9	3	12	84	35	164	98	7.31	4.50	31	-779	1307	10	1800	160
-.3	6	0	10	72	30	124	84	8.31	5.00	36	-1279	807	7	800	120
2.3	3	--	8	60	25	84	70	9.31	5.50	41	-1779	307	4	---	80
4.3	0	--	6	48	20	44	56	10.31	6.00	46	-2279	-193	1	---	40

Influence of Price Changes on Farm Earnings

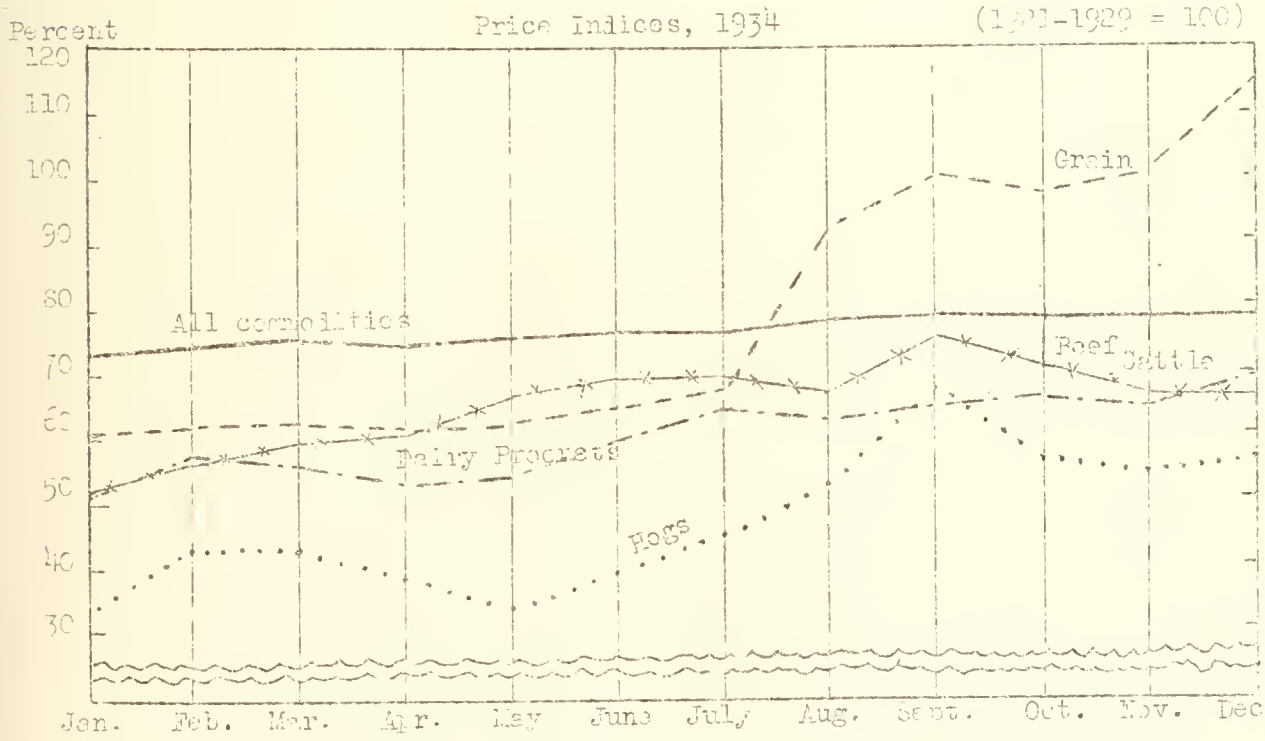
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in McDonough County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in McDonough County, 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	36	39	30	30	36
Average size of farms, acres	212	216	222	221	237
Average rate earned, to pay for management, risk and capital	2.2%	-1.7%	-1.1%	6.9%	5.7%
Average labor and management wage	$-431	$-1 979	$-1 374	$1 090	$758
Gross income per acre	20.31	10.38	8.59	17.58	16.10
Operating cost per acre	16.10	13.44	10.16	8.15	8.18
Average value of land per acre	133	127	97	98	99
Total investment per acre	193	176	140	137	138
Investment per farm in:					
Total livestock	3 574	2 842	1 981	2 024	2 027
Cattle	1 271	1 125	795	963	1 025
Hogs	1 570	1 086	638	543	542
Poultry	158	137	57	115	78
Gross income per farm	5 303	2 245	1 905	3 885	3 821
Income per farm from:					
Crops	---	---	---	1 329	265
Miscellaneous income	44	36	61	26	2
Total livestock	4 259	2 209	---	2 530	3 500
Cattle	489	309	403	474	999
Dairy sales	308	279	219	262	225
Hogs	3 214	1 394	1 022	1 590	2 002
Poultry	241	220	190	151	80
Average yield of corn in bu.	35	45	63	50	15
Average yield of oats in bu.	40	47	53	34	9
Average yield of wheat in bu.	24	23	17	24	16

ANNUAL FARM BUSINESS REPORT ON THIRTY-ONE FARMS IN ADAMS COUNTY, ILLINOIS, 1934

P. E. Johnston, J. Ackerman, T. R. Hedges*

Farm earnings on the 31 accounting farms in Adams County averaged 2.3 percent for 1934 which is the second highest return during the past five years. 1933 was highest with an average return of 3.6 percent. The 1934 return is remarkable considering the severe drouth and chinch bug damage.

These 31 accounts show for 1934 an average net income of $625 per farm, as compared with an average of $867 in 1933 and an average net loss of $612 in 1932. The average cash income in 1934 was $3,874 per farm, the cash business expenditures $2,240 per farm, leaving a cash balance of $1,634 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) The low yields were directly responsible for the decrease in inventory of $242 a farm. This decrease, deducted from the cash balance, resulted in an average excess of receipts over expenses of $1,392 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average and were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

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*S. F. Russell, farm adviser in Adams County cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group has a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report and was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 31 accounting farms the most successful third shows an average net income of $2,056, the average net loss of the least successful third of the farms was $436. In 1933 the comparable net incomes for the two groups was $1,876 and $-12 respectively.

Investments, Receipts, Expenses and Earnings on
31 Adams County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
CAPITAL INVESTMENTS				
Land		19 081	29 947	12 853
Farm improvements		3 710	3 756	3 882
Livestock total		1 662	2 193	1 159
Horses		409	402	333
Cattle		739	1 153	493
Hogs		410	551	241
Sheep		45	28	35
Poultry		59	59	57
Machinery and equipment		1 018	1 216	849
Feed, grain and supplies		1 231	1 778	763
Total capital investment	$	$26 702	$38 890	$19 506
RECEIPTS AND NET INCREASES				
Livestock total		2 446	3 382	1 522
Horses		39	52	3
Cattle		592	1 291	139
Hogs (including AAA payments)		1 437	2 185	968
Sheep		47	38	18
Poultry		61	57	69
Egg sales		69	64	88
Dairy sales		201	195	237
Feed and grains (including AAA payments)		---	269	---
Labor off farm		142	93	98
Miscellaneous receipts		6	1	14
Total receipts & net increases	$	$ 2 594	$ 4 245	$ 1 634
EXPENSES AND NET DECREASES				
Farm improvements		178	203	152
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		298	389	233
Feed, grain and supplies		158	---	397
Livestock expense		64	140	20
Crop expense		128	219	87
Hired labor		135	207	54
Taxes		221	256	237
Miscellaneous expenses		20	23	14
Total expenses & net decreases	$	$ 1 202	$ 1 437	$ 1 194
RECEIPTS LESS EXPENSES	$	$ 1 392	$ 2 808	$ 440
Total unpaid labor		767	752	878
Operator's labor		540	540	540
Family labor		227	212	338
Net income from investment and management		625	2 056	-438
RATE EARNED ON INVESTMENT	%	2.34%	5.28%	-2.24%
Return to capital and operator's labor and management		1 165	2 596	102
5% of capital invested		1 335	1 945	975
LABOR AND MANAGEMENT WAGE	$	$ -170	$ 651	$ -873

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$11.	1	$ 1.	8
9.	4	-1.	5
7.	0	-3.	4
5	4	-5.	1
3.	4		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 311 acres each, the least successful 226 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of hogs, cattle and grains accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance. Owing to the extremely poor yields in Adams County, the value of grain at the end of the year was not as much as at the beginning even though prices of grain had more than doubled. This condition was aggravated by the fact that Adams County has much livestock and with very little feed produced, farmers were compelled to buy grain at a high price while livestock prices were still relatively low.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	1,797	365
Average of 10 most successful farms .	2,723	700
Average of 10 least successful farms.	1,096	49
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year; which with the rise of the grain prices, was one of the important factors accounting for the difference in farm earnings.

The decrease in inventory for the 31 Adams County farms averages $242. The 1933 inventory values increased $596; while in 1932 there was a decrease of $808. The decreases in 1934 were: livestock, $10; feed and grain, $153; improvements, $91. The machinery inventory increased $12. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning Inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	1,662	1,652	-10	
Feed and grains	1,231	1,078	-153	
Machinery	1,018	1,030	12	
Improvements (except residence)	3,710	3,619	-91	
Total	7,621	7,379	-242	

Some Adjustments on Adams County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. Operating costs on the accounting farms in Adams County declined from $12.82 an acre in 1931 to $8.11 an acre in 1934. In this county, 1934 operating costs were the lowest since 1928. While in some other areas more favored by rainfall, the operating costs increased because of better crops resulting in a larger cash income which in turn permitted the purchase of repair and replacements of machinery and improvements. Adams County farmers must wait for more favorable weather and crop conditions before making this expansion.

Cash Income and Expenses on Accounting Farms in Adams County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock		392	1 155		2 848	4 412
Feed and grains		822	987		817	847
Machinery		360	515		50	61
Improvements		98	180		11	1
Labor		135	336		142	78
Miscellaneous		20	31		6	13
Livestock expense		64	61		---	---
Crop expense		128	197		---	---
Taxes		221	259		---	---
Total		2 040	3 721		3 849	5 412
Excess of cash sales over expenses					1 634	1 691
Increase in inventory					-242	145
Income to labor and capital (Receipts less expenses)					1 392	1 836

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 71 percent of that in 1929, cash expenditures were only 55 percent as large. In 1934 livestock purchases were 34 percent and feed and grain purchases 83 percent as large as in 1929. In 1934 these farms paid out 70 percent as much for machinery and 65 percent as much for crop expense as in 1929, while taxes were reduced to only 85 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $6.61 as compared with a loss of $1.94 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and

The most profitable farms were larger and carried larger inventories on which to make a profit when prices advanced. All crop yields were near a complete failure and yet the most profitable farms had 6.5 bushels an acre of corn and 5.0 bushels an acre of oats more than the least profitable. This advantage in crop yields and the larger beginning inventories of grain, combined with more and better livestock, were the principal factors for the higher earnings of the most profitable farms.

The total operating costs on the acre basis were $2.12 higher on the least profitable farms. This is accounted for mostly by a difference of $1.84 in labor cost. Machinery cost was $.10 an acre less on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	9	$106	4	$122	8	$263	$355
1/3 least profitable farms	8	81	5	66	8	183	245
All accounting farms	26	85	13	84	25	227	290

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

As an average of all accounting farms, the payments actually received ($290) were more than sufficient to pay all of the 1934 taxes, ($221).

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 20.8 contracted acres which were used as follows: 5.7 idle; 2.9 red clover; 3.5 sweet clover; 3.0 soybeans; 2.7 alfalfa and 3.0 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as most of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
31 Adams County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
Size of farms--acres	____	242.7	311.1	226.2
Percent of land area tillable		82.8	85.	74.7
Percent of tillable land in hay and pasture		45.7	43.0	41.4
Gross receipts per acre	____	10.69	13.65	7.22
Total expenses per acre		8.11	7.04	9.16
Net receipts per acre		2.58	6.61	-1.94
Value of land per acre		79	96	57
Total investment per acre		110	125	86
Acres in Corn	____	50.2	64	48.6
Oats	____	19.9	20	18.9
Wheat	____	17.3	25.8	17.5
Soybeans	____	9.4	23.9	1.9
Hay	____	29.2	35.9	27.4
Tillable pasture	____	62.6	77.8	42.6
Crop yields--Corn, bu. per acre	____	5.6	7.5	1.0
Oats, bu. per acre	____	4.0	5.8	.8
Wheat, bu. per acre	____	14.8	16.1	13.7
Value of feed fed to productive L.S.	____	1 804	2 504	1 425
Returns per $100 of feed fed to productive livestock	____	133	153	106
Returns per $100 invested in:				
Cattle	____	111	138	75
Poultry	____	209	209	245
Pigs weaned per litter	____	6.4	7.4	5.8
Income per litter farrowed	____	99	153	68
Dairy sales per dairy cow	____	38	30	36
Investment in productive L.S. per A.	____	5.06	5.75	3.63
Receipts from productive L.S. per A.	____	9.92	12.31	6.72
Man labor cost per crop acre	____	6.06	5.17	7.01
Machinery cost per crop acre	____	2.15	2.08	1.84
Power and mach. cost per crop A.	____	3.51	3.24	3.14
Farms with tractor	____	61.2%	80%	50%
Value of feed fed to horses	____	227	267	168
Man labor cost per $100 gross income	____	32	23	54
Expenses per $100 gross income	____	76	52	127
Farm improvements cost per acre	____	.73	.65	.67
Excess of sales over cash expenses	____	1 634	2 752	747
Increase in inventory	____	-242	56	-307
Rate earned on investment	____	2.34	5.28	-2.24
Gross receipts per farm	____	2 594	4 245	1 634

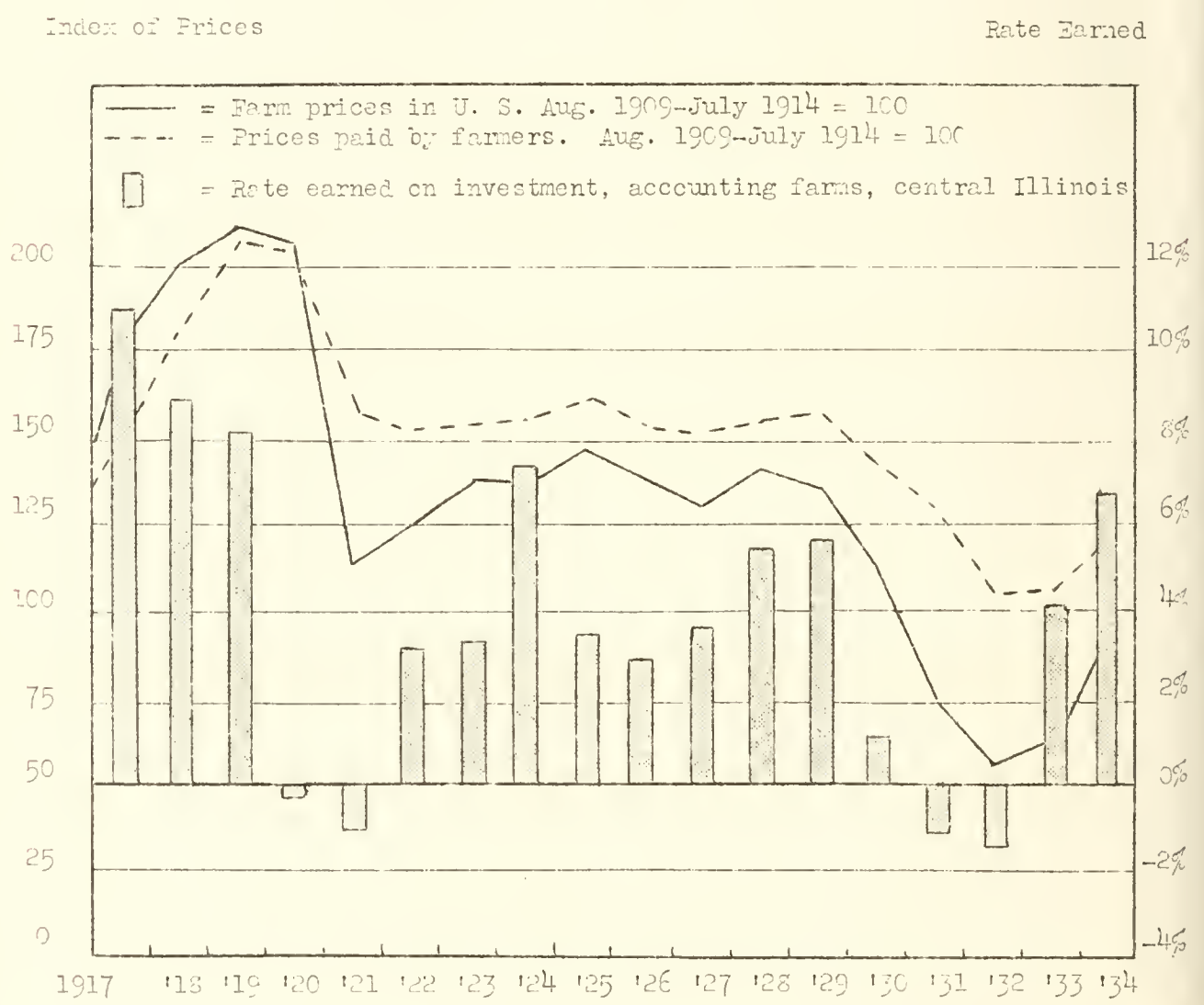
Chart for Studying the Efficiency of Various Parts of Your Business,
Adams County, 1934

The numbers above the lines across the middle of the page are the averages for the 31 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Wheat	Hogs: Income per litter	Dairy sales per dairy cows	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 Gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
12.34	11	9	25	174	66	359	193	--	1.00	--	1250	3034	21	5100	140
10.34	10	8	23	159	60	329	181	.86	1.50	12	950	2757	19	4600	400
8.34	9	7	21	144	54	299	169	2.16	2.00	17	650	2474	17	4100	360
6.34	8	6	19	129	48	269	157	3.46	2.50	22	350	2194	15	3600	320
4.34	7	5	17	114	42	239	145	4.76	3.00	27	50	1914	13	3100	280
2.34	5.6	4.0	14.8	99	38	209	133	6.06	3.51	32	-242	1634	10.69	2594	242.7
.34	4	3	13	84	32	179	121	7.36	4.00	37	-600	1354	9	2100	200
-1.66	3	2	11	69	26	149	109	8.66	4.50	42	-950	1074	7	1600	160
-3.66	2	1	9	54	20	119	97	9.96	5.00	47	-1250	794	5	1100	120
-5.66	1	0	7	39	14	89	85	11.26	5.50	52	---	514	3	600	80
-7.66	0	---	5	24	8	59	73	12.56	6.00	57	---	234	1	100	40

Influence of Price Changes on Farm Earnings

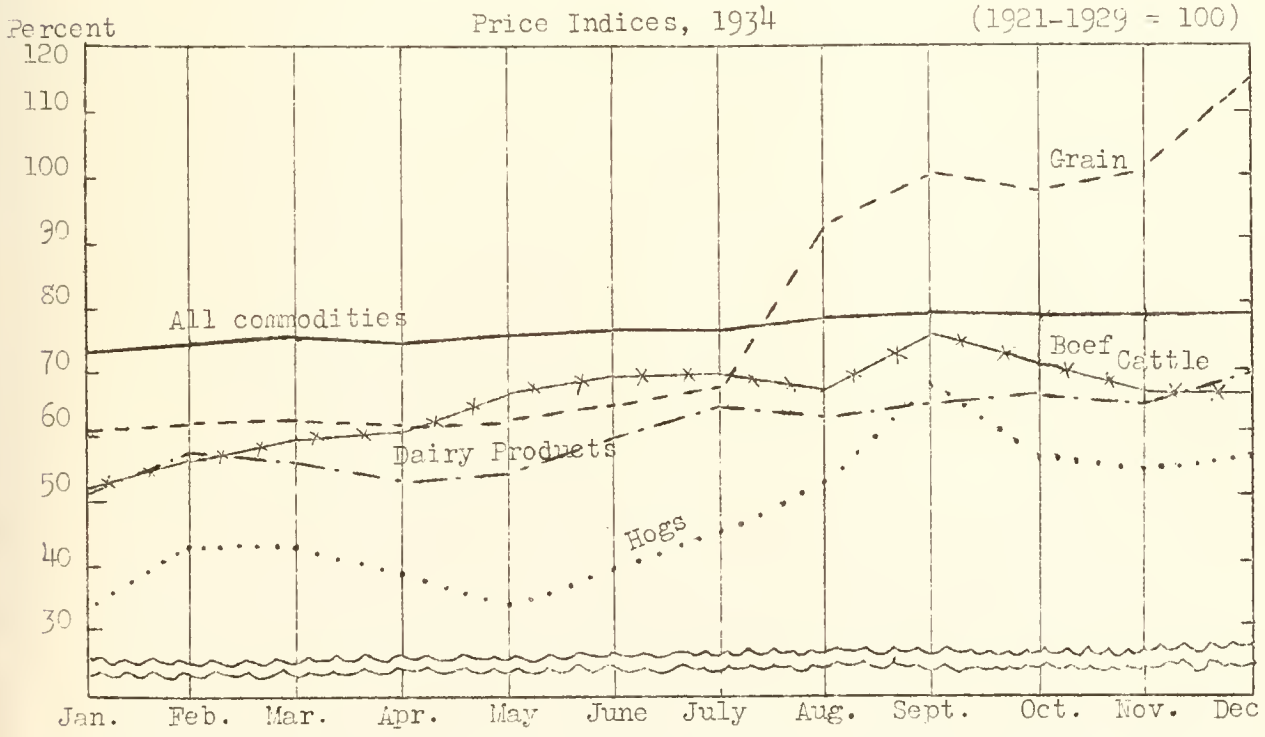
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income and expenditures on the account-farms in Adams County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935 as usual will depend upon individual efficiency weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Adams County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	30	31	30	30	31
Average size of farms, acres	198	178	210	217	243
Average rate earned, to pay for management, risk and capital	1.3%	-3.1%	-2.6%	3.6%	2.
Average labor and management wage	$-386	$-1 323	$-1 301	$177	$ -170
Gross income per acre	14.26	8.69	5.81	12.16	10.
Operating cost per acre	12.41	12.82	8.72	8.16	8.
Average value of land per acre	98	87	77	78	79
Total investment per acre	145	131	113	111	110
Investment per farm in:					
Total livestock	2 517	1 915	1 594	1 629	1 662
Cattle	1 094	802	674	748	739
Hogs	785	592	393	341	410
Poultry	144	115	77	86	59
Gross income per farm	2 820	1 543	1 223	2 638	2 594
Income per farm from:					
Crops	---	---	---	733	-158
Miscellaneous income	92	63	74	52	6
Total livestock	2 728	1 480	1 149	1 853	2 446
Cattle	220	38	239	323	592
Dairy sales	419	390	165	261	201
Hogs	1 861	861	597	1 077	1 437
Poultry	203	166	116	113	~~61~~ 130
Average yield of corn in bu.	29	39	50	45	6
Average yield of oats in bu.	30	41	40	25	4
Average yield of wheat in bu.	20	23	12	19	15

ANNUAL FARM BUSINESS REPORT ON THIRTY-THREE FARMS IN HANCOCK COUNTY, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and T. R. Hedges*

The farm earnings of 33 account-keeping farmers in Hancock County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 33 accounts show for 1934 an average net income of $1,365 per farm, as compared with an average of $928 in 1933, and an average net loss of $388 in 1932. The average cash income in 1934 was $3,909 per farm, the cash business expenditures $2,196 per farm, leaving a cash balance of $1,713 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $342 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,055 per farm. The inventory increase was a smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good thoughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* T. H. Hafer, farm adviser in Hancock County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 33 accounting farms the most successful third shows an average net income of $2,181 while the average net income of the least successful third of the farms was only $743. In 1933 the comparable net incomes for the two groups was $1,749, and $99 respectively.

Investments, Receipts, Expenses and Earnings on 33 Hancock County Farms in 1934

Items	Your farm	Average of 33 farms	11 most profitable farms	11 least profitable farms
CAPITAL INVESTMENTS				
Land		21 313	19 799	26 105
Farm improvements		3 758	3 568	4 645
Livestock total		1 647	1 529	1 495
Horses		394	304	399
Cattle		720	725	575
Hogs		415	406	383
Sheep		54	32	79
Poultry		64	62	59
Machinery and equipment		1 301	1 192	984
Feed and grains		1 538	1 641	1 389
Total capital investment	$	$29 557	$27 729	$34 618
RECEIPTS AND NET INCREASES				
Livestock total		2 641	2 544	2 746
Horses		15	21	21
Cattle		503	531	667
Hogs (including AAA payments)		1 593	1 524	1 489
Sheep		82	45	115
Poultry		76	71	78
Egg sales		85	81	73
Dairy sales		287	271	303
Feed and grains (including AAA payments)		476	1 187	---
Labor off farm		69	93	33
Miscellaneous receipts		2	---	2
Total receipts & net increases	$	$ 3 188	$ 3 824	$ 2 781
EXPENSES AND NET DECREASES				
Farm improvements		183	130	218
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		305	260	312
Feed and grains		---	---	120
Livestock expense		63	30	131
Crop expense		138	132	134
Hired labor		211	249	154
Taxes		208	206	230
Miscellaneous expenses		25	21	33
Total expenses & net decreases	$	$ 1 133	$ 1 028	$ 1 332
RECEIPTS LESS EXPENSES	$	$ 2 055	$ 2 796	$ 1 449
Total unpaid labor		690	615	706
Operator's labor		513	503	540
Family labor		177	112	166
Net income from investment and management		1 365	2 181	743
RATE EARNED ON INVESTMENT	%	4.61%	7.87%	2.15%
Return to capital and operator's labor and management		1 878	2 684	1 283
% of capital invested		1 478	1 386	1 731
LABOR AND MANAGEMENT WAGE	$	$ 400	$ 1 298	$ -448

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15	1	$5	7
13	4	3	9
11	4	1	2
9	1	-1	1
7	4		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms had a smaller total capital investment than either the least profitable farms or the average of all accounting farms. Despite the smaller investment, the most profitable farms had higher total receipts and net increases than either the least profitable farms or the average of all farms. The larger receipts and net increases from feed and grain was a major factor in accounting for this difference. The total operating expenses per acre, including the charge for family labor, was less on the most profitable farms than on the least profitable group.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 348	813
Average of 11 most successful farms	2 721	1 328
Average of 11 least successful farms	2 187	411
Your farm		

The difference in quantities of grain inventoried was one of the factors influencing the difference in earnings. The most profitable farms had a larger inventory of corn, both at the beginning and at the end of the year, than did the least profitable farms. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Hancock County was $342 in 1934, as compared with $279 in 1933, and an inventory loss of $721 per farm in 1932. There were increases of $135 in total livestock, and $253 in feed and grain, while improvements showed a decrease of $29 and machinery, a decrease of $17. The decrease in machinery and improvements was the smallest it has been since 1930, indicating that more of the necessary repairs and replacements are being made, but still not enough to offset the depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 647	$1 782	$135	$
Feed and grains	1 538	1 791	253	
Machinery	1 301	1 284	-17	
Improvements (except residence)	3 758	3 729	-29	
Total	$8 244	$8 586	$342	$

Some Adjustments on Hancock County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were $1.06 an acre higher in 1934 than in 1933, while cash operating expenses were $2,196 per farm in 1934, as compared with $1,509 in 1933. This increase in cash operating expenses can be attributed very largely to the increase in cash expenditures for feed and grains, and for machinery and supplies for machinery. The increase in expenditures for feed and grains may be attributed to the drouth. Indications point to an expansion of spending for 1935, particularly for machinery and improvements, since farmers have postponed replacements and repairs of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Hancock County for 1929 and 1934

Items	Your farm 1934	Average cash expenses per farm 1934	Average cash expenses per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 240	$ 829	$	$2 746	$4 215
Feed and grains		798	632		1 021	1 542
Machinery		359	746		71	223
Improvements		154	295		---	8
Labor		211	437		69	44
Miscellaneous		25	30		2	11
Livestock expense		63	43		---	---
Crop expense		138	251		---	---
Taxes		208	313		---	---
Total	$	$2 196	$3 576	$	$3 909	$6 043
Excess of cash sales over expenses				$	$1 713	$2 476
Increase in inventory					342	698
Income to labor and capital (Receipts less expenses)					2 055	3 165

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average accounting farm in Hancock County spent 59 percent of the cash income as operating expenses in 1929, while in 1934 the average accounting farm spent 56 percent. The relationship, therefore, between cash income and expenses for the two years is practically the same, but the 1934 cash income and expenses are only 61 percent as large as 1929. There was, however, considerable difference in the distribution of the expense items. In 1934 livestock purchases were 29 percent, and feed and grain purchases 126 percent as large as in 1929. In 1934 these farms paid out 48 percent as much for machinery, and 55 percent as much for crop expense as in 1929, while taxes were reduced to 66 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

After deducting total expenses and net decreases, including family labor, from receipts and net increases, there remained a net increase of $11.14 per acre for the most profitable farms, as compared with $3.27 per acre for the least profitable farms. This represents a return on capital invested in the farm business of 7.87 percent on the most profitable farms, and 2.15 percent on the least profitable farms. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms averaged 31.4 acres smaller, but they had a larger proportion of their land area tillable, and had 148.6 crop acres, as compared with 155 crop acres on the least profitable farms. The most profitable farms carried larger inventories of feed and grains on which to make a profit when prices advanced. One reason for the larger inventories was the higher crop yields, there being an advantage of 4.7 bushels of corn, and 0.7 bushels of oats in favor of the high profit group. The least profitable farms had a higher yield of wheat, but the difference in acreage between the two groups was very small.

The most profitable farms had an investment of $6.46 per acre in productive livestock, as compared with an investment of $5.18 per acre on the least profitable farms. The most profitable farms fed $1,370 of feed to productive livestock, securing a return of $135 for each $100 worth of feed fed, while the least profitable farms fed $2,057 of feed, securing a return of $132 for each $100 worth of feed fed. The most profitable farms saved 6.4 pigs per litter, and secured a return of $112 per litter farrowed, as compared with 5.7 pigs per litter and a return of $78 per litter farrowed on the least profitable farms.

Higher total operating expenses on the least profitable farms amounting to 58 cents an acre was an important factor in the reduced net earnings of this group. Every item of expenses and net decreases except hired labor was higher on the least profitable farms. Man labor costs per crop acre were $5.42 on the most profitable farms, as compared with $5.34 on the least profitable farms, while power and machinery costs per crop acre amounted to $2.98 on the most profitable farms, and $3.72 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	Average of all payments 1/
1/3 most profitable farms	11	$133	1	$11	11	$198	$332
1/3 least profitable farms	10	111	1	39	10	214	299
All accounting farms	32	122	5	53	32	213	334

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $126 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 19.3 contracted acres which were used as follows: 3.6 idle; 6.4 mixed clover and timothy; 1.1 sweet clover; 3.4 soybeans; 2.6 alfalfa; and 2.2 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program, there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 33 Hancock County Farms in 1934

Items	Your farm	Average of 33 farms	11 most profitable farms	11 least profitable farms
Size of farms--acres		216.8	195.8	227.2
Percent of land area tillable		87.6	92.4	84.1
Percent of tillable land in hay and pasture		39.1	36.4	36.1
Gross receipts per acre		$ 14.70	$ 19.53	$ 12.24
Total expenses per acre		8.40	8.39	8.97
Net receipts per acre		6.30	11.14	3.27
Value of land per acre		98	101	115
Total investment per acre		136	142	152
Acres in Corn		44.7	44.0	46.7
Oats		28.4	32.3	24.9
Wheat		8.7	8.8	10.3
Soybeans		19.9	12.9	21.8
Hay		33.2	33.6	33.0
Tillable pasture		41.1	32.3	36.0
Crop yields--Corn, bu. per acre		10.6	12.7	8.0
Oats, bu. per acre		10.0	12.5	11.8
Wheat, bu. per acre		20.2	18.2	20.9
Value of feed fed to productive L.S.		2 024	1 870	2 057
Returns per $100 of feed fed to productive livestock		130	135	132
Returns per $100 invested in:				
Cattle		109	106	163
Poultry		237	238	236
Pigs weaned per litter		5.9	6.4	5.7
Income per litter farrowed		93	112	78
Dairy sales per dairy cow		42	39	52
Investment in productive L.S. per A.		6.10	6.46	5.18
Receipts from productive L.S. per A.		12.11	12.89	11.99
Man labor cost per crop acre		5.81	5.42	5.34
Machinery cost per crop acre		2.05	1.75	2.01
Power and mach. cost per crop A.		3.67	2.98	3.72
Farms with tractor		75.7%	91%	64%
Value of feed fed to horses		257	204	285
Man labor cost per $100 gross income		27	21	30
Expenses per $100 gross income		57	43	73
Farm improvements cost per acre		.84	.66	.96
Excess of sales over cash expenses		1 713	1 931	1 652
Increase in inventory		342	865	-203
Rate earned on investment		4.61%	7.87%	2.15%
Gross receipts per farm		3 188	3 824	2 781

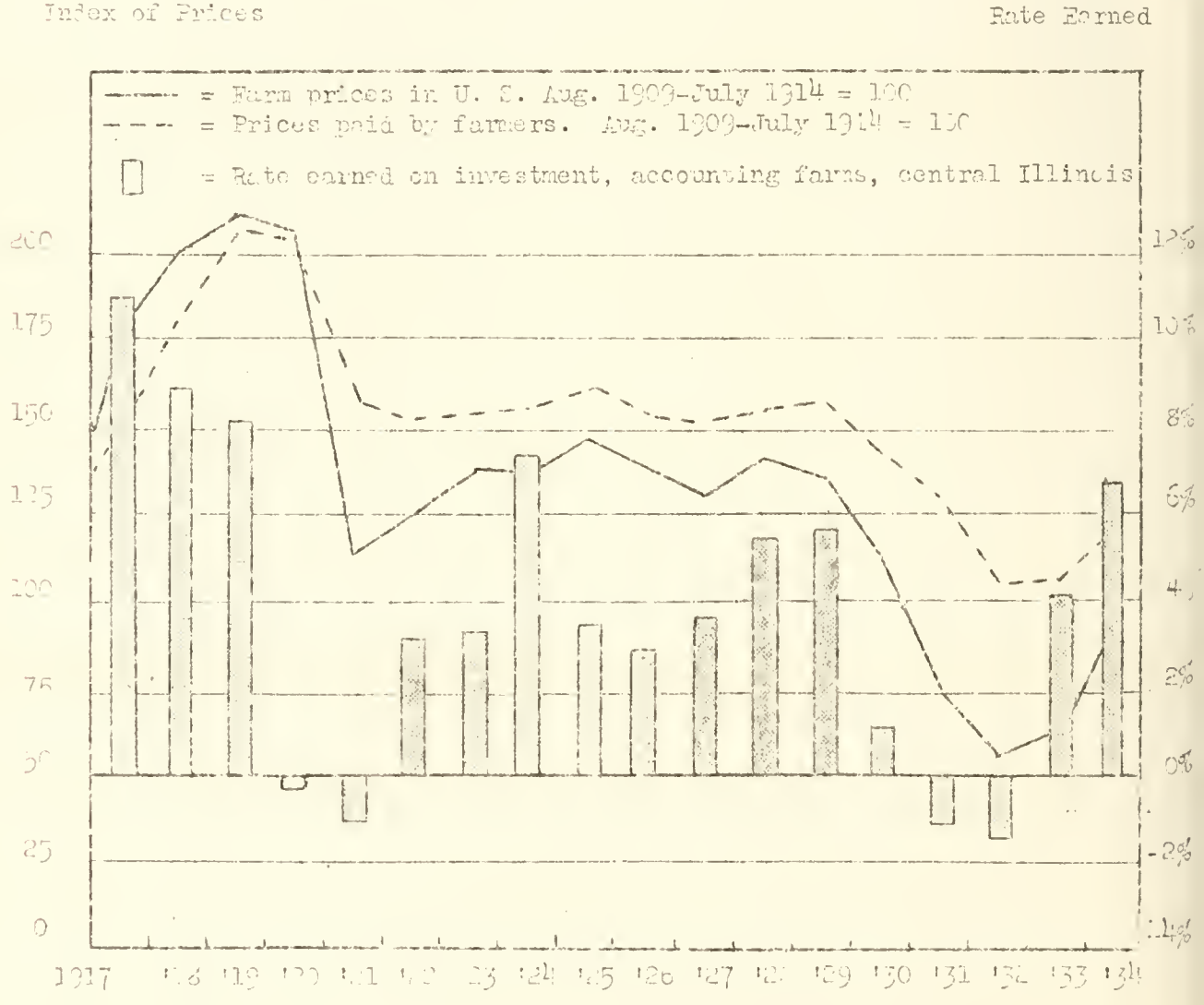
Chart for Studying the Efficiency of Various Parts of Your Business,
Hancock County, 1934

he numbers above the lines across the middle of the page are the averages for the 3 farms included in this report for the factors named at the top of the page. y drawing a line across each column at the number measuring the efficiency of your arm in that factor, you can compare your efficiency with that of other farmers in our locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Wheat	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
2.11	21	20	30	143	72	437	190	--	--	2	2350	4200	30	6200	420
0.61	19	18	28	133	66	397	178	1.00	--	7	1950	3700	27	5600	380
9.11	17	16	26	123	60	357	166	2.20	.67	12	1550	3200	24	5000	340
7.61	15	14	24	113	54	317	154	3.40	1.67	17	1150	2700	21	4400	300
6.11	13	12	22	103	48	277	142	4.60	2.67	22	750	2200	18	3800	260
4.61	10.6	10.0	20.2	93	42	237	130	5.81	3.67	27	342	1713	14.70	3188	216.8
3.11	9	8	18	83	36	197	118	7.00	4.67	32	-50	1200	12	2600	180
1.61	7	6	16	73	30	157	106	8.20	5.67	37	-450	700	9	2000	140
.11	5	4	14	63	24	117	94	9.40	6.67	42	-850	200	6	1400	100
1.39	3	2	12	53	18	77	82	10.60	7.67	47	-1250	-300	3	800	60
2.89	1	0	10	43	12	37	70	11.80	8.67	52	-1650	-800	0	200	20

Influence of Price Changes on Farm Earnings

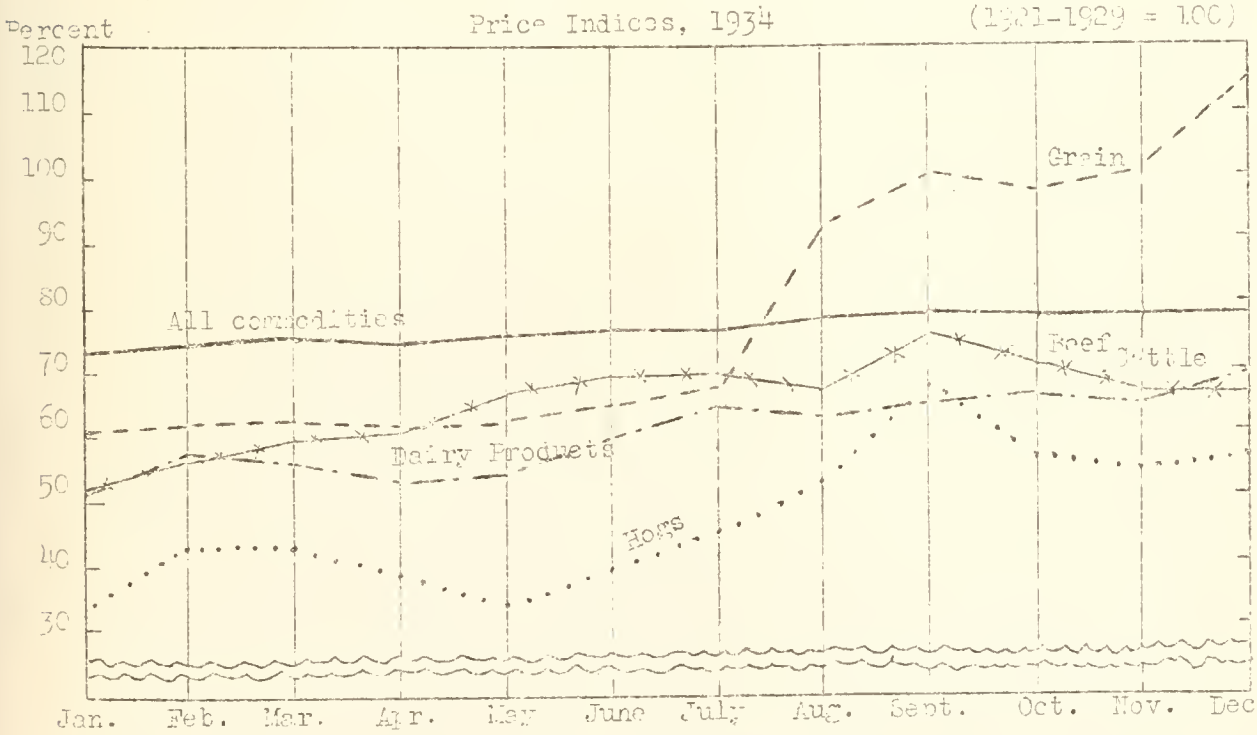
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.30 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale prices of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Hancock County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure, and followed the smaller than average crop of 1933, the increased prices of both grain and livestock caused the 1934 earnings to be the highest for the five-year period 1930-1934.

Earnings in 1935 as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Hancock County for 1930-1934

Items	1930	1931	1932	1933 1/	1934
Number of farms	30	30	30	33	33
Average size of farms, acres	208	195	197	206	217
Average rate earned, to pay for management, risk and capital	2.1%	-1.7%	-1.3%	3.6%	4.6%
Average labor and management wage	$-526	$-1 731	$-1 351	$132	$400
Gross income per acre	15.95	7.93	6.17	11.85	14.70
Operating cost per acre	11.69	10.93	8.14	7.34	8.40
Average value of land per acre	147	128	112	92	98
Total investment per acre	202	175	151	126	136
Investment per farm in:					
Total livestock	3 136	2 281	1 670	1 558	1 647
Cattle	1 484	920	713	671	720
Hogs	1 004	798	430	384	415
Poultry	151	100	84	65	64
Gross income per farm	3 310	1 549	1 216	2 439	3 188
Income per farm from:					
Crops	419	---	---	755	476
Miscellaneous income	40	23	42	43	2
Total livestock	2 851	1 526	1 174	1 641	2 641
Cattle	233	129	231	276	503
Dairy sales	466	209	146	156	287
Hogs	1 960	1 042	669	1 049	1 593
Poultry	190	133	91	128	76
Average yield of corn in bu.	34	44	52	38	11
Average yield of oats in bu.	39	29	41	28	10

1/ Records from Hancock and Schuyler Counties included for 1933.

ANNUAL FARM BUSINESS REPORT ON SIXTY FARMS IN HENRY, STARK, AND BUREAU COUNTIES, ILLINOIS, 1934

P. E. Johnston, E. L. Sauer, and J. Ackerman*

The farm earnings of 60 account-keeping farmers in Henry, Stark, and Bureau Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 60 accounts show for 1934 an average net income of $2,373 per farm, as compared with an average of $1,710 in 1933, and an average net loss of $477 in 1932. The average cash income in 1934 was $4,563 per farm, the cash business expenditures $2,209 per farm, leaving a cash balance of $2,354 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $702 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,056 per farm. The inventory increase was a smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*H. K. Danforth, Wayne N. Gilbert, and Paul V. Dean, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 60 accounting farms, the most successful third shows an average net income of $3,699, while the average net income on the least successful third of the farms was $938. In 1933 the comparable net income for the groups was $2,679, and $787 respectively. Figured on a cash basis the most successful farms had on an average, $1,228 more cash income left with which to meet interest payments and family living expenses in 1934, than did the least successful farms.

Investments, Receipts, Expenses and Earnings on 60 Henry, Stark, and Bureau County Farms in 1934

Items	Your farm	Average of 60 farms	20 most profitable farms	20 least profitable farms
CAPITAL INVESTMENTS				
Land		23 676	21 700	23 426
Farm improvements		4 739	4 129	5 066
Livestock total		2 080	1 781	1 984
Horses		395	351	421
Cattle		1 024	824	882
Hogs		498	487	397
Sheep		99	37	224
Poultry		64	82	60
Machinery and equipment		1 457	1 317	1 194
Feed and grains		1 998	2 249	1 603
Total capital investment	$	$33 950	$31 176	$33 273
RECEIPTS AND NET INCREASES				
Livestock total		3 076	3 434	2 242
Horses		44	44	10
Cattle		870	905	564
Hogs (including AAA payments)		1 581	1 824	1 180
Sheep		147	104	164
Poultry		91	89	88
Egg sales		79	128	49
Dairy sales		264	340	187
Feed and grains (including AAA payments)		1 022	1 773	493
Labor off farm		94	160	57
Miscellaneous receipts		2	1	3
Total receipts & net increases	$	$ 4 194	$ 5 363	$ 2 795
EXPENSES AND NET DECREASES				
Farm improvements		196	156	193
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		340	253	365
Feed and grains		---	---	---
Livestock expense		34	33	27
Crop expense		122	114	128
Hired labor		184	135	197
Taxes		238	233	255
Miscellaneous expenses		24	25	23
Total expenses & net decreases	$	$ 1 138	$ 954	$ 1 138
RECEIPTS LESS EXPENSES	$	$ 3 056	$ 4 414	$ 1 607
otal unpaid labor		683	715	669
Operator's labor		531	537	539
Family labor		152	178	130
et income from investment and management		2 373	3 699	938
ATE EARNED ON INVESTMENT	%	6.99%	11.86%	2.82%
eturn to capital and operator's labor and management		2 904	4 236	1 477
% of capital invested		1 697	1 559	1 664
ABOR AND MANAGEMENT WAGE	$	$ 1 207	$ 2 677	$ -187

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$23 and over	4	$11	6
21	2	9	6
19	2	7	5
17	3	5	3
15	8	3	7
13	10	1 and under	4

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes, with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 207 acres each, the least successful 220 acres. This group, chiefly because of the smaller acreage and the lower value on the land, had a smaller total investment than either the least profitable farms or the average of all accounting farms. However, the most profitable farms had a larger average investment in total livestock and in feed and grains. The difference in receipts from feed and grains, hogs, cattle, and dairy products accounts for most of the difference in income between the two groups. The total expenses per farm and per acre, including the charge for family labor, was less on the most profitable farms than on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amoung of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	3 319	1 699
Average of 20 most successful farms	3 873	2 641
Average of 20 least successful farms	2 386	792
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and at the end of the year. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Henry, Stark, and Bureau Counties was $702 in 1934, as compared with $761 in 1933, and an inventory loss of $1,228 per farm in 1932. There were increases of $410 in total livestock, $362 in feed and grains, and $19 in machinery, while improvements showed a decrease of $89. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 080	$2 490	$410	$
Feed and grains	1 998	2 360	362	
Machinery	1 457	1 476	19	
Improvements (except residence)	4 739	4 650	-89	
Total	$10 274	$10 976	$702	$

Some Adjustments on Henry, Stark, and Bureau County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. Farm operating costs on Henry, Stark, and Bureau County account-keeping farms have declined each year since 1931. Total operating expenses were $1.35 per acre lower in 1934 than in 1933, but cash operating expenses were $2,209 per farm in 1934, as compared with $2,132 in 1933. The largest increase in expenditure over the previous year was for machinery and supplies for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the five-year period since 1929.

Cash Income and Expenses on Accounting
Farms in Henry, Stark, and Bureau Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 628	$1 483	$	$3 294	$6 564
Feed and grains		420	830		1 080	919
Machinery		451	643		92	113
Improvements		108	261		1	---
Labor		184	467		94	34
Miscellaneous		24	30		2	1
Livestock expense		34	56		---	---
Crop expense		122	196		---	---
Taxes		238	338		---	---
Total	$	$2 209	$4 304	$	$4 563	$7 631
Excess of cash sales over expenses				$	$2 354	$3 327
Increase in inventory					702	159
Income to labor and capital (Receipts less expenses)					3 056	3 486

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 60.0 percent of that in 1929, cash expenditures were only 51 percent as large. In 1934 livestock purchases were 42 percent, and feed and grain purchases 50 percent as large as in 1929. In 1934 these farms paid out 70 percent as much for machinery, 41 percent as much for improvements, and 62 percent as much for crop expense as in 1929, while taxes were reduced to 70 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $17.89, as compared with $4.27 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms had more livestock, and were more efficient in their livestock operations than the least profitable farms. They had an investment of $8.50 an acre in productive livestock, as compared with an investment of $7.60 an acre on the least profitable farms. The most profitable farms fed $2,315 worth of feed to productive livestock, securing a return of $146 for each $100 worth of feed fed, while the least profitable farms fed $1,898 worth of feed, and secured only $118 for each $100 worth of feed fed. The most profitable farms had a return of $132 for each $100 invested in cattle, while the least profitable farms secured $85 for each $100 invested in cattle.

The most profitable farms, although having 13.1 fewer total acres, had 11.5 more crop acres than the least profitable farms. They had 9.7 acres more corn, and 12.4 acres more oats than the least profitable farms. The most profitable farms secured 11.1 bushels more corn per acre than the least profitable farms. Because of the larger crop acreage and the higher yields, the most profitable farms had larger inventories of feed and grain on which to make a profit when prices advanced. Crop yields were so low on the least profitable farms that they had an average inventory loss of $121 per farm in the feed and grain account, in spite of the price advance.

The larger income on the most profitable farms was secured with a total operating cost of $8.07 per acre, as compared with $8.44 per acre on the least profitable farms. Man labor costs per crop acre were $5.06 on the most profitable farms, as compared with $5.69 on the least profitable farms, while power and machinery costs per crop acre amounted to $2.70 on the most profitable farms, and $3.94 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	19	$137	1	$43	20	$191	$324
1/3 least profitable farms	19	126	-	--	20	145	265
All accounting farms	58	142	1	43	60	178	316

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $78 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 19 contracted acres which were used as follows: 3.4 idle; 4.1 mixed clover and timothy; 2.2 sweet clover; 4.6 soybeans; 2.5 alfalfa; and 2.2 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the stnadpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 60 Henry, Stark, and Bureau County Farms in 1934

Items	Your farm	Average of 60 farms	20 most profitable farms	20 least profitable farms
Size of farms--acres		211.7	206.8	219.9
Percent of land area tillable		90.2	90.2	87.8
Percent of tillable land in hay and pasture		38.8	33.4	42.1
Gross receipts per acre		19.81	25.96	12.71
Total expenses per acre		8.60	8.07	8.44
Net receipts per acre		11.21	17.89	4.27
Value of land per acre		112	105	107
Total investment per acre		160	151	151
Acres in Corn		64.0	68.8	59.1
Oats		36.5	42.8	30.4
Wheat		.9	1.0	.2
Soybeans		6.7	4.5	10.0
Hay		31.2	29.5	30.4
Tillable pasture		42.9	32.8	50.8
Crop yields--Corn, bu. per acre		31.3	35.9	24.8
Oats, bu. per acre		4.3	4.2	3.1
Soybeans, bu. per acre		15.5	14.8	17.4
Value of feed fed to productive L.S.		2 333	2 315	1 898
Returns per $100 of feed fed to productive livestock		130	146	118
Returns per $100 invested in:				
Cattle		111	132	85
Poultry		236	252	201
Pigs weaned per litter		5.7	5.7	6.1
Income per litter farrowed		111	113	113
Dairy sales per dairy cow		43	47	35
Investment in productive L.S. per A.		8.84	8.50	7.60
Receipts from productive L.S. per A.		14.32	16.39	10.15
Man labor cost per crop acre		5.54	5.06	5.69
Machinery cost per crop acre		2.29	1.65	2.57
Power and mach. cost per crop A.		3.44	2.70	3.94
Farms with tractor		72%	75%	55%
Value of feed fed to horses		213	206	205
Man labor cost per $100 gross income		20	15	29
Expenses per $100 gross income		43	31	66
Farm improvements cost per acre		.93	.75	.88
Excess of sales over cash expenses		2 354	2 786	1 558
Increase in inventory		702	1 628	49
Rate earned on investment		6.99%	11.86%	2.82%
Gross receipts per farm		4 194	5 368	2 795

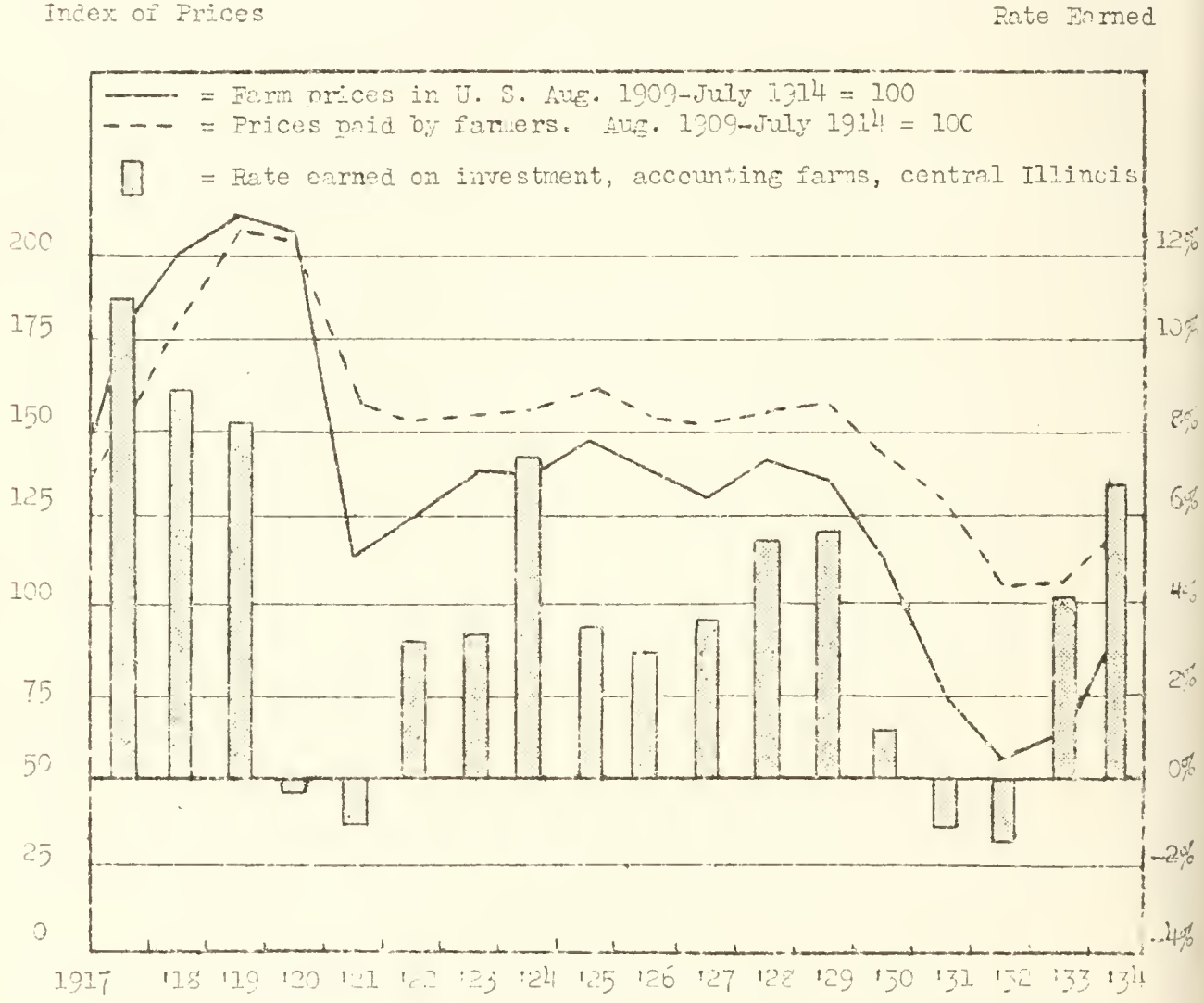
Chart for Studying the Efficiency of Various Parts of Your Business, Henry, Stark, and Bureau Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 60 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre		Cattle income per $100 invested	Hogs: Income per litter	Dariy sales per dairy cow	Poultry income per $100 invested	U.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats						Labor	Power and machinery				Per acre	Per farm	
4.5	51	14	161	161	68	436	190	.54	--	--	3200	4350	30	7200	410
3.0	47	12	151	151	63	396	178	1.54	.50	--	2700	4350	28	6600	370
1.5	43	10	141	141	58	356	166	2.54	1.25	2	2200	3850	26	6000	330
0.0	39	8	131	131	53	316	154	3.54	2.00	8	1700	3350	24	5400	290
3.5	35	6	121	121	48	276	142	4.54	2.75	14	1200	2850	22	4800	250
3.09	31.3	4.3	111	111	43	236	130	5.54	3.44	20	702	2354	19.81	4194	211.7
2.5	27	2	101	101	38	196	118	6.54	4.25	26	200	1850	18	3600	170
1.0	23	0	91	91	33	156	106	7.54	5.00	32	-300	1350	16	3000	130
.5	19	--	81	81	28	116	94	8.54	5.75	38	-800	850	14	2400	90
.0	15	--	71	71	23	76	82	9.54	6.50	44	-1300	350	12	1800	50
.5	11	--	61	61	18	36	70	10.54	7.25	50	--	-150	10	1200	--

Influence of Price Changes on Farm Earnings

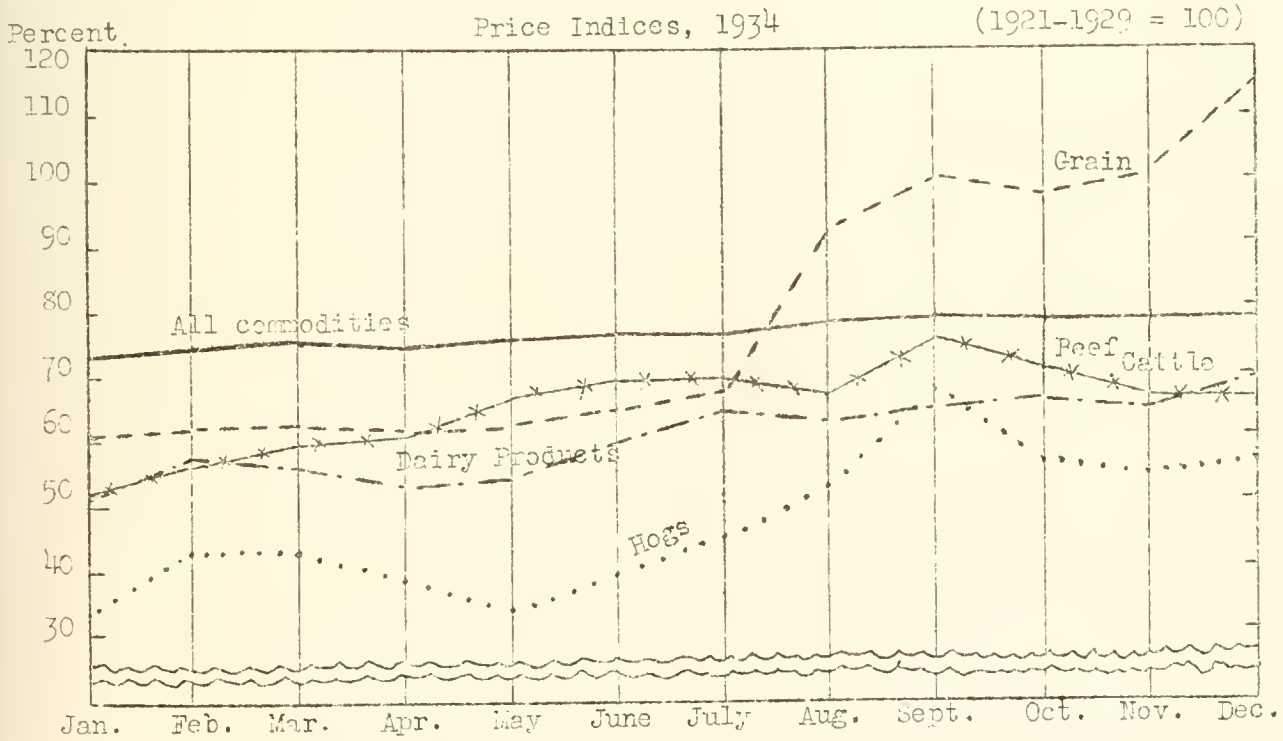
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variations in Earnings over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Henry, Stark, and Bureau Counties for the last five years is very interesting because of the violent changes in price level. The crop yields in 1934 were very low, yet total receipts per farm were higher than in any other year in the last five, and were 79 percent of the 1929 gross receipts. Operating costs continued to decline in 1934. Thus profits were the best the county had experienced since 1928.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices, which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Henry, Stark, and Bureau Counties for 1930-1934

Items	1930 1/	1931 2/	1932 1/	1933 2/	1934
Number of farms	43	30	41	38	60
Average size of farms, acres	212	194	244	190	212
Average rate earned, to pay for management, risk and capital	1.6%	-2.5%	-1.2%	5.1%	7.0%
Average labor and management wage	$-722	$-2 305	$-1 851	$ 537	$1 207
Gross income per acre	16.23	8.52	7.26	18.95	19.81
Operating cost per acre	12.90	13.55	9.21	9.95	8.60
Average value of land per acre	141	139	111	124	112
Total investment per acre	203	199	156	177	160
Investment per farm in:					
Total livestock	3 948	2 866	2 846	2 316	2 080
Cattle	1 886	1 241	1 471	1 276	1 024
Hogs	1 296	973	738	505	498
Poultry	146	151	98	86	64
Gross income per farm	3 440	1 652	1 775	3 600	4 194
Income per farm from:					
Crops	232	---	---	1 499	1 022
Miscellaneous income	26	34	30	30	2
Total livestock	3 182	1 618	1 745	2 071	3 076
Cattle	557	225	660	617	870
Dairy sales	392	405	189	247	264
Hogs	1 999	827	777	1 033	1 581
Poultry	220	160	95	108	91
Average yield of corn in bu.	43	48	64	52	31
Average yield of oats in bu.	45	46	30	41	4

1/ Records from Warren County included for 1930 and 1932.
2/ Record for Henry and Bureau Counties only for 1931 and 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-EIGHT FARMS IN WARREN AND KNOX COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. E. Wills, and T. R. Hedges*

The farm earnings of 38 account-keeping farmers in Warren and Knox counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the businesses of these farms. The three years previous to 1933 showed very low returns.

These 38 accounts show for 1934 an average net income of $2,526 per farm, as compared with an average of $2,033 in 1933, and an average net loss of $477 in 1932. The average cash income in 1934 was $4,797 per farm, the cash business expenditures $2,298 per farm, leaving a cash balance of $2,499 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $712 a farm due mostly to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,211 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another..

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* E. H. Walworth and A. R. Kemp, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans was much better compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 38 accounting farms the most successful third shows an average net income of $4,452, while the average net income on the least successful third of the farms was $1,055. In 1933, the comparable net income for the two groups was $3,608, and $752 respectively.

Investments, Receipts, Expenses and Earnings on 38 Warren and Knox County Farms in 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		25 026	31 809	21 531
Farm improvements		4 224	4 361	4 268
Livestock total		1 881	2 096	1 897
Horses		457	472	387
Cattle		865	924	1 083
Hogs		462	615	336
Sheep		35	26	29
Poultry		62	59	62
Machinery and equipment		1 370	1 722	987
Feed and grains		2 053	2 717	1 335
Total capital investment	$	$34 554	$42 705	$30 018
RECEIPTS AND NET INCREASES				
Livestock total		2 915	4 283	2 315
Horses		31	56	---
Cattle		917	1 481	912
Hogs (including AAA payments)		1 511	2 240	1 070
Sheep		74	28	52
Poultry		51	49	33
Egg sales		74	62	61
Dairy sales		257	367	187
Feed and grains (including AAA payments)		1 400	2 271	410
Labor off farm		70	99	68
Miscellaneous receipts		1	1	1
Total receipts & net increases	$	$ 4 386	$ 6 654	$ 2 794
EXPENSES AND NET DECREASES				
Farm improvements		178	172	153
Horses		---	---	9
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		326	448	252
Feed and grains		---	---	---
Livestock expense		58	51	98
Crop expense		122	142	114
Hired labor		235	348	206
Taxes		226	272	184
Miscellaneous expenses		30	38	30
Total expenses & net decreases	$	$ 1 175	$ 1 471	$ 1 046
RECEIPTS LESS EXPENSES	$	$ 3 211	$ 5 183	$ 1 748
Total unpaid labor		685	731	693
Operator's labor		529	540	540
Family labor		156	191	153
Net income from investment and management		2 526	4 452	1 055
RATE EARNED ON INVESTMENT	%	7.31%	10.42%	3.51%
Return to capital and operator's labor and management		3 055	4 992	1 595
5% of capital invested		1 728	2 135	1 501
LABOR AND MANAGEMENT WAGE	$	$ 1 327	$ 2 857	$ 94

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$21	1	$9	5
19	3	7	5
17	0	5	7
15	2	3	1
13	5	1	1
11	6	-1	2

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net income, with those having the lowest income will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 299 acres each, the least successful 194 acres. This difference in size accounts in part for the variation in the average investments, receipts, and expenses in the two groups. Difference in receipts from the sale of grains, hogs, and cattle accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	3 520	1 578
Average of 13 most successful farms	4 390	2 284
Average of 13 least successful farms	2 269	887
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and at the end of the year. With the rapid rise in corn prices, this was one of the important factors accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms in Warren and Knox counties was $712 in 1934, as compared with $704 in 1933, and an inventory loss of $1,228 a farm in 1932. There were increases of $477 in total livestock, $221 in feed and grain, and $38 in machinery, while improvements showed a decrease of $24. Such an increase in inventory as that for machinery results from the value of repairs and replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 881	$2 358	$477	$
Feed and grains	2 053	2 274	221	
Machinery	1 370	1 408	38	
Improvements (except residence)	4 224	4 200	-24	
Total	$9 528	$10 240	$712	$

Some Adjustments on Warren and Knox County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1930 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 34 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,298 a farm in 1934 as compared with $2,029 in 1933. Low crop yields, combined with the usual large amount of livestock on Warren and Knox County farms, necessitated the purchase of considerably more feed in 1934 than in 1933. There was also a significant increase in expenditures over 1933 for livestock and machinery, but a considerable decrease in expenditure for taxes. Indications point to an increase of expenditures for machinery and improvements in 1935, since farmers have postponed repairs and replacements for these items during the four-year period since 1930.

Cash Income and Expenses on Accounting Farms in Warren and Knox Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 525	$1 229	$	$2 963	$5 858
Feed and grains		461	721		1 640	2 165
Machinery		485	892		121	164
Improvements		156	226		2	16
Labor		235	480		70	52
Miscellaneous		30	27		1	6
Livestock expense		58	54		---	---
Crop expense		122	267		---	---
Taxes		226	364		---	---
Total	$	$2 298	$4 260	$	$4 797	$8 261
Excess of cash sales over expenses				$	$2 499	$4 001
Increase in inventory					712	189
Income to labor and capital (Receipts less expenses)					3 211	4 190

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average cash income in 1934 was 58 percent of that in 1929, while cash expenditures were 54 percent as large. In 1934 livestock purchases were 43 percent, and feed and grain purchases 64 percent as large as in 1929. In 1934 these farms paid out 54 percent as much for machinery, 46 percent as much for crop expense, and 69 percent as much for improvements as in 1929, while taxes were reduced to 62 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitabel farms in this study had net receipts per acre of $14.91 as compared with $5.43 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms had more livestock per farm, and were more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $7.09 per acre, and fed $2,871 of feed per farm, as compared with an investment of $7.67 per acre, and $1,650 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $147 for each $100 of feed fed, as compared with a return of $140 for each $100 of feed fed on the least profitable farms. The most profitable farms weaned an average of 6.1 pigs per litter and had an income of $165 per litter farrowed, as compared with 5.3 pigs weaned per litter, and an income of $86 per litter farrowed on the least profitable group. There were returns of $150 for each $100 invested in cattle on the most profitable farms, as compared with returns of $103 per $100 invested in cattle on the least profitable farms.

The most profitable farms in this study averaged 104.3 acres larger, and had a larger proportion of their land area tillable than the least profitable farms. They had 32.0 acres more corn, 13.0 acres more oats, 34.2 acres more soybeans, and 12.1 acres more hay than the least profitable farms. Since soybeans and hay were two of the high-profit crops in 1934, their larger acreage of these crops was an important factor in accounting for the higher returns from feed and grains on the most profitable farms. The most profitable farms also carried larger inventories of feed and grains on which to make a profit when prices advanced. Along with the larger acreage of crops, another reason for the larger inventories of feed and grain was the higher crop yields, there being an advantage of 5.4 bushels of corn, 3.1 bushels of oats, 8.2 bushels of wheat, and 4.7 bushels of soybeans per acre in favor of the high-profit group.

The larger income on the most profitable farms was secured with a total operating cost of $7.37 per acre, as compared with $3.95 per acre for the least profitable farms. The man labor costs were $3.00 per crop acre lower, while power and machinery costs were 85 cents per crop acre lower for the most successful farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	13	$192	3	$189	13	$233	$468
1/3 least profitable farms	13	130	1	248	13	145	294
All accounting farms	38	157	5	190	38	188	370

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $144 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 22.1 contracted acres which were used as follows: 5.3 idle; 5.3 mixed red clover and timothy; 1.4 sweet clover; 4.2 soybeans; 2.1 alfalfa; and 3.8 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 38 Warren and Knox County Farms in 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		235.8	298.6	194.3
Percent of land area tillable		85.1	87.3	80.8
Percent of tillable land in hay and pasture		36.6	32.7	43.9
Gross receipts per acre		18.60	22.28	14.38
Total expenses per acre		7.89	7.37	8.95
Net receipts per acre		10.71	14.91	5.43
Value of land per acre		106	107	111
Total investment per acre		147	143	154
Acres in Corn		66.5	82.7	50.7
Oats		26.0	30.3	17.3
Wheat		4.5	5.0	5.2
Soybeans		18.4	40.7	6.5
Hay		31.0	36.0	23.9
Tillable pasture		42.5	49.4	45.0
Crop yields--Corn, bu. per acre		28.7	30.8	25.4
Oats, bu. per acre		2.6	3.8	0.7
Wheat, bu. per acre		4.0	9.4	1.2
Soybeans, bu. per acre		20.5	20.1	15.4
Value of feed fed to productive L.S.		2 043	2 871	1 650
Returns per $100 of feed fed to productive livestock		141	147	140
Returns per $100 invested in:				
Cattle		120	150	103
Poultry		198	185	157
Pigs weaned per litter		5.6	6.1	5.3
Income per litter farrowed		110	165	86
Dairy slaes per dairy cow		47	59	39
Investment in productive L.S. per A.		7.03	7.09	7.67
Receipts from productive L.S. per A.		12.23	14.16	11.91
Man labor cost per crop acre		5.56	4.79	7.79
Machinery cost per crop acre		2.06	2.12	2.25
Power and mach. cost per crop A.		3.19	3.07	3.92
Farms with tractor		71%	85%	54%
Value of feed fed to horses		209	258	178
Man labor cost per $100 gross income		20	15	31
Expenses per $100 gross income		42	33	62
Farm improvements cost per acre		.75	.58	.79
Excess of sales over cash expenses		2 499	3 109	1 987
Increase in inventory		712	2 074	-239
Rate earned on investment		7.31	10.42	3.51
Gross receipts per farm		4 386	6 654	2 794

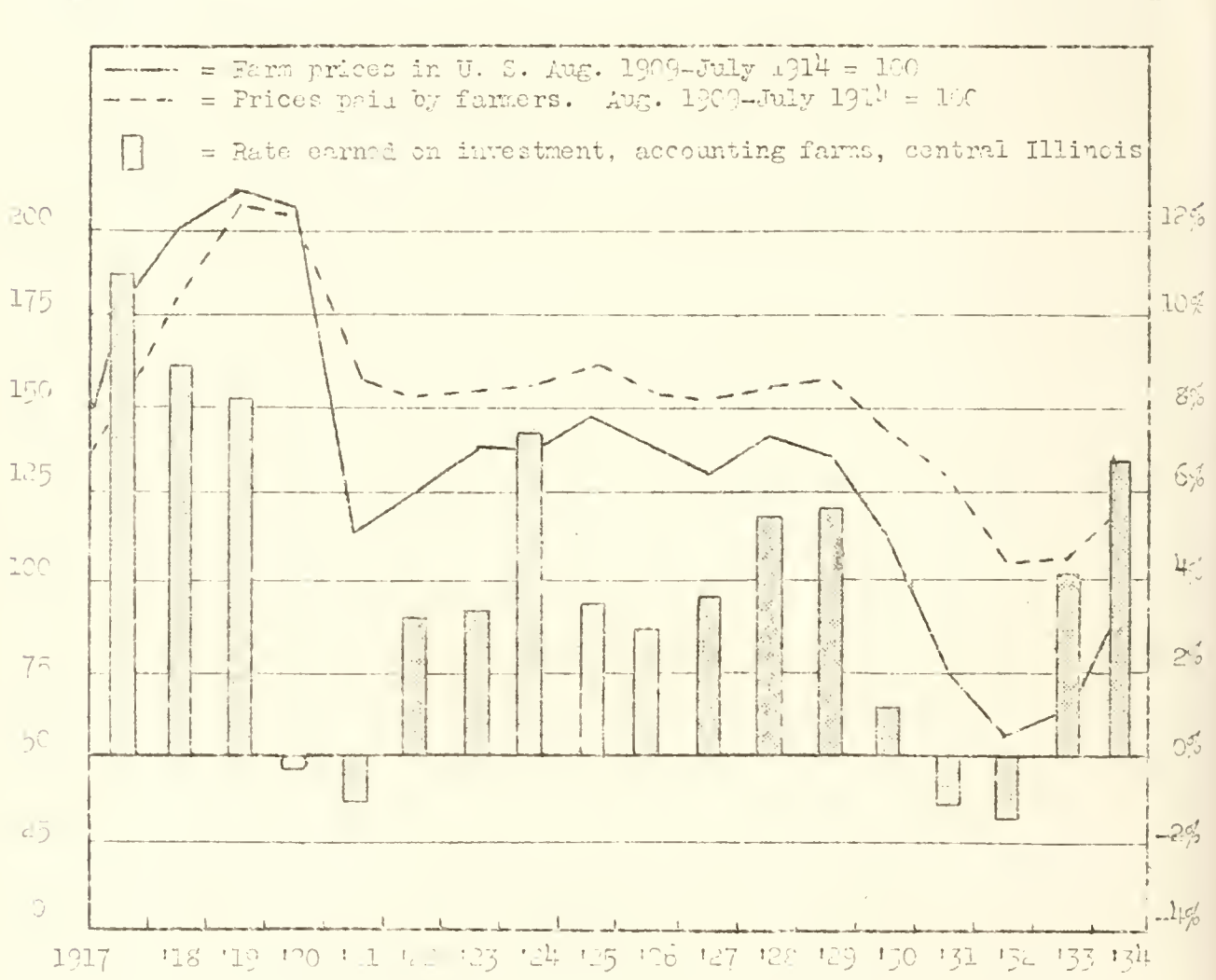
Chart for Studying the Efficiency of Various Parts of Your Business,
Warren and Knox Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 38 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
12.3	49	13	20	210	97	398	291	--	--	--	5712	7500	39	12900	536
11.3	45	11	28	190	87	358	261	.76	--	4	4712	6500	35	11400	476
10.3	41	9	26	170	77	318	231	1.96	--	8	3712	5500	31	9900	416
9.3	37	7	24	150	67	278	201	3.16	.59	12	2712	4500	27	8400	356
8.3	33	5	22	130	57	238	171	4.36	1.89	16	1712	3500	23	6900	296
7.31	28.7	2.6	20.5	110	47	198	141	5.56	3.19	20	712	2499	18.60	4336	235.8
6.3	25	1	18	90	37	158	111	6.76	4.49	24	-288	1500	15	2900	176
5.3	21	--	16	70	27	118	81	7.96	5.79	28	-1288	500	11	1400	116
4.3	17	--	14	50	17	78	51	9.16	7.09	32	-2288	--	7	--	56
3.3	13	--	12	30	7	38	21	10.36	8.39	36	-3288	--	3	--	--
2.3	9	--	10	10	--	--	--	11.56	9.69	40	-4288	--	--	--	--

Influence of Price Changes on Farm Earnings

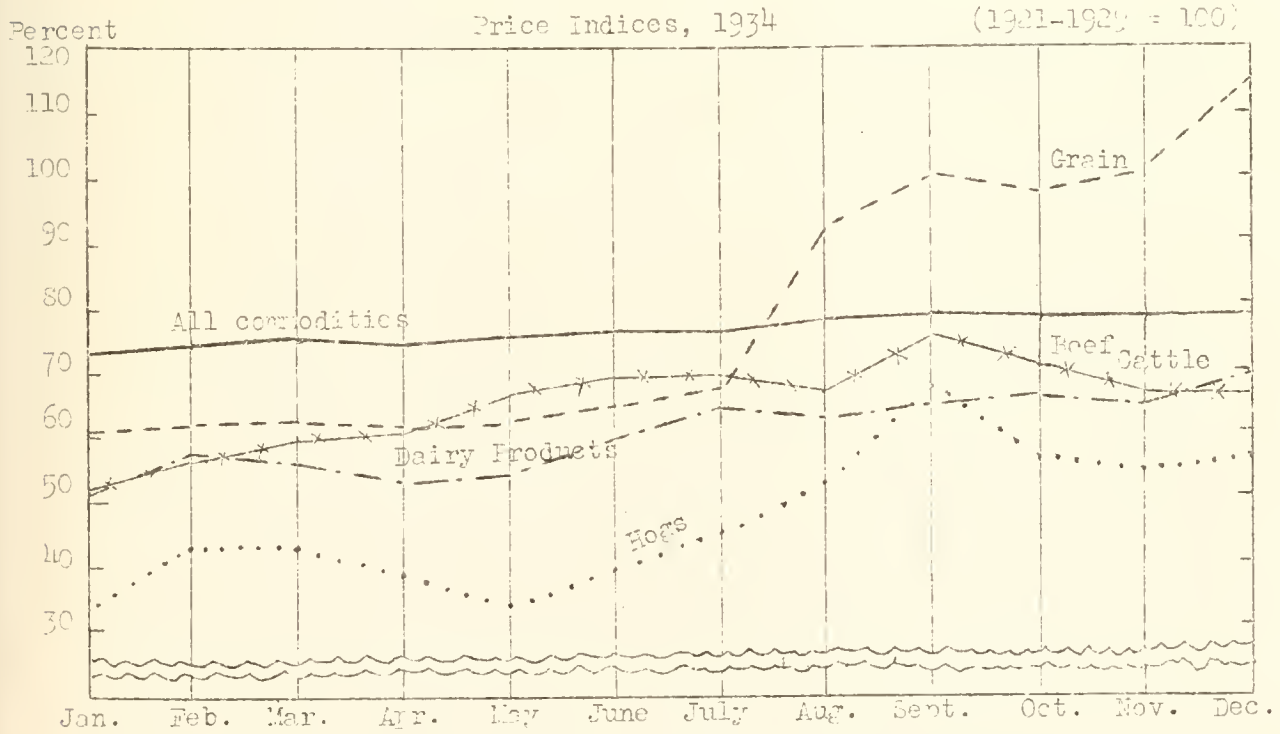
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Warren and Knox counties for the last five years is very interesting because of the violent changes in price level. Crop yields were low in 1934 for the second year, yet total receipts per farm were higher than in any other year in the last five, and were 65 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county has experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Warren and Knox Counties for 1930-1934

Items	1930 1/	1931 2/	1932 1/	1933	1934
Number of farms	43	30	41	32	38
Average size of farms, acres	212	242	244.5	268	236
Average rate earned, to pay for management, risk and capital	1.6%	-1.1%	-1.2%	5.1%	7.31%
Average labor and management wage	$-722	$-1 845	$-1 851	$ 557	$1 327
Gross income per acre	16.23	9.58	7.26	15.16	18.60
Operating cost per acre	12.90	11.44	9.21	7.55	7.89
Average value of land per acre	141	115	111	110	106
Total investment per acre	203	164	156	150	147
Investment per farm in:					
Total livestock	3 948	3 612	2 846	2 630	1 881
Cattle	1 836	1 725	1 471	1 383	865
Hogs	1 296	1 206	738	617	462
Poultry	146	130	98	76	62
Gross income per farm	3 440	2 322	1 775	4 061	4 386
Income per farm from:					
Crops	232	---	---	1 810	1 400
Miscellaneous income	26	25	30	44	1
Total livestock	3 182	2 297	1 745	2 207	2 915
Cattle	557	584	660	563	917
Dairy sales	392	216	189	243	257
Hogs	1 999	1 352	777	1 211	1 511
Poultry	220	139	95	108	~~51~~ 125
Average yield of corn in bu.	43	49	64	42	29
Average yield of oats in bu.	45	47	50	31	3

1/ Records from Warren, Bureau and Henry Counties included for 1930 and 1932.
2/ Records from Warren County only included for 1931.

ANNUAL FARM BUSINESS REPORT ON THIRTY-NINE FARMS IN PEORIA, SCHUYLER, AND FULTON COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. Ackerman, and T. R. Hedges*

Farm earnings on the 39 accounting farms in Peoria, Schuyler, and Fulton Counties averaged 4.2 percent for 1934. This is the second highest return during the past five years, 1933 having the highest with an average return of 5.4 percent. The 1934 return is very good considering the severe drouth and chinch bug damage.

These 39 accounts show for 1934 an average net income of $968 per farm, as compared with an average of $1,572 in 1933, and an average net loss of $490 in 1932. The average cash income in 1934 was $3,050 per farm, the cash business expenditures $1,635 per farm, leaving a cash balance of $1,415 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $298 a farm due mostly to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,713 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* J. W. Whisenand, L. E. McKinzie, and J. E. Watt, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yield of wheat and soybeans was much better compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 39 accounting farms the most successful third shows an average net income of $2,340, while the least successful third of the farms had an average net loss of $299. In 1933 the two groups had net incomes of $2,936, and $313, respectively.

Investments, Receipts, Expenses and Earnings in 39 Peoria, Schuyler, and Fulton County Farms in 1934

Items	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		$15 630	$17 431	$14 086
Farm improvements		3 415	3 466	3 896
Livestock total		1 587	1 717	1 867
Horses		413	383	473
Cattle		630	707	813
Hogs		425	493	444
Sheep		46	68	56
Poultry		73	66	81
Machinery and equipment		1 215	1 237	1 316
Feed and grains		1 113	1 279	1 034
Total capital investment	$	$22 960	$25 130	$22 199
RECEIPTS AND NET INCREASES				
Livestock total		2 003	2 180	1 962
Horses		34	8	70
Cattle		309	345	311
Hogs (including AAA payments)		1 207	1 242	1 233
Sheep		66	108	47
Poultry		84	99	58
Egg sales		111	114	108
Dairy sales		192	264	135
Feed and grains (including AAA payments)		538	1 745	---
Labor off farm		91	110	108
Miscellaneous receipts		6	10	8
Total receipts & net increases	$	$ 2 633	$ 4 045	$ 2 078
EXPENSES AND NET DECREASES				
Farm improvements		189	156	266
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		294	283	358
Feed and grains		---	---	503
Livestock expense		24	23	24
Crop expense		103	108	116
Hired labor		108	159	93
Taxes		182	210	177
Miscellaneous expenses		25	21	33
Total expenses & net decreases	$	$ 925	$ 960	$ 1 570
RECEIPTS LESS EXPENSES	$	$ 1 713	$ 3 085	$ 508
Total unpaid labor		745	745	807
Operator's labor		540	540	540
Family labor		205	205	267
Net income from investment and management		968	2 340	-299
RATE EARNED ON INVESTMENT	%	4.22%	9.31%	-1.34%
Return to capital and operator's labor and management		1 508	2 880	241
5% of capital invested		1 148	1 256	1 110
LABOR AND MANAGEMENT WAGE	$	$ 360	$ 1 624	$ -869

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$17	1	$5	3
15	2	3	2
13	2	1	4
11	4	-1	8
9	5	-3	3
7	4	-5	1

A further study of the farm businesses, made by comparing the investments, receipts and expenses of the group of farms having the highest net income with those having the lowest net incomes, will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms averaged 201 acres each, the least profitable 221 acres. The most profitable farms had a larger investment in feed and grains, and a larger total farm investment than the least profitable farms. Differences in receipts and net increases from feed and grains account for much of the difference in income between the two groups of farms. The total operating expenses per acre, including the charge for family labor, was less on the most profitable farms than on the least profitable group.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	1 333	690
Average of 13 most successful farms	1 562	1 226
Average of 13 least successful farms	930	344
Your farm		

The most profitable farms had a larger inventory of corn, both at the beginning and at the end of the year. With the rise in corn prices, this was one of the important factors accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms in Peoria, Schuyler, and Fulton Counties was $298 in 1934, as compared with $637 in 1933, and a decrease of $704 in 1932. There were increases of $87 in livestock, and $313 in feed and grain, and decreases of $23 in machinery, and $79 in improvements. The inventory decrease in machinery was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made, but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 587	$1 674	$ 87	$
Feed and grains	1 113	1 426	313	
Machinery	1 215	1 192	-23	
Improvements (except residence)	3 415	3 336	-79	
Total	$7 330	$7 628	$298	$

Some Adjustments on Peoria, Schuyler, and Fulton County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as a result of changes in their cash income. Farm operating costs on accounting farms in this area have declined each year since 1930. The total operating expenses were 22 cents an acre lower in 1934 than in 1933, while the cash operating expenses were $1,635 a farm in 1934, as compared with $1,583 in 1933. Due to the drouth and the consequent reduced feed supply there was an increase of $317 in cash expenses for feed and grain over the previous year. There were significant decreases in expenses, as compared with the previous year, for taxes, livestock, and labor. If incomes permit, indications point to an increase of spending in 1935 for repairs and replacement of machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Peoria, Schuyler, and Fulton Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 222	$ 542	$	$2 138	$4 162
Feed and grains		493	553		718	1 594
Machinery		364	750		93	169
Improvements		114	374		4	3
Labor		108	364		91	118
Miscellaneous		25	28		6	11
Livestock expense		24	64		---	---
Crop expense		103	266		---	---
Taxes		182	273		---	---
Total	$	$1 635	$3 214	$	$3 050	$6 057
Excess of cash sales over expenses				$	$1 415	$2 843
Increase in inventory					298	444
Income to labor and capital (Receipts less expenses)					1 713	3 287

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average accounting farm in this study spent 53 percent of the cash income as operating expenses in 1929, while in 1934 the average accounting farm spent 54 percent of the cash income as operating expenses. The relationship, therefore, between cash income and expenses for the two years is approximately the same, but the 1934 cash income and expenses are only 50.5 percent as large as in 1929. There was, however, considerable difference in the distribution of the expense items. In 1934 the livestock purchases were 41 percent, and feed and grain purchases 39 percent as large as in 1929. In 1934 these farms paid out 49 percent as much for machinery, 30 percent as much for improvements, and 39 percent as much for crop expense as in 1929, while taxes were reduced to 67 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $11.63, as compared with a loss of $1.35 per acre for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms, although having 20.1 fewer total acres, had a larger proportion of their land area tillable, and had 5.5 more crop acres than the least profitable farms. They had 17.4 acres more corn, and 3.9 acres more soybeans than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. Along with the larger acreage of crops, another reason for the larger inventories was the higher crop yields, there being an advantage of 19 bushels of corn, 6.3 bushels of oats, 10.2 bushels of wheat, and 11.7 bushels of soybeans per acre in favor of the high-profit group.

The most profitable farms had a larger average investment in productive livestock, and were more efficient in their livestock feeding operations than the least profitable farms. They had an investment in productive livestock of $7.27 per acre, and fed $1,261 of feed per farm, as compared with $5.76 invested per acre, and $1,652 of feed fed per farm on the least profitable farms. The productive livestock on the most profitable farms returned $172 for each $100 of feed fed, as compared with returns of $115 for each $100 of feed fed on the least profitable farms. The most profitable farms had an income of $97 per litter farrowed, as compared with $90 for the low-profit group.

The larger income on the most profitable farms was secured with a total operating cost of $8.47 per acre, as compared with $10.74 on the least profitable farms. Man labor costs per crop acre were $6.89 on the most profitable farms, as compared with $7.15 on the least profitable farms, while power and machinery costs per crop acre were $3.56 on the most profitable farms and $4.71 on the low-profit group.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	13	$101	8	$81	15	$170	$321
1/3 least profitable farms	11	51	6	65	12	184	243
All accounting farms	37	77	17	74	37	172	268

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average of accounting farms in this study, the payments actually received were $86 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 13.2 contracted acres which were used as follows: 2.3 idle; 2.3 mixed clover; .3 sweet clover; 3.5 soybeans; 2.9 alfalfa and 1.9 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 39 Peoria, Schuyler, and Fulton County Farms in 1934

Items	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		200.8	201.2	221.3
Percent of land area tillable		71.3	76.5	65.9
Percent of tillable land in hay and pasture		37.2	36.2	42.4
Gross receipts per acre		13.13	20.10	9.39
Total expenses per acre		8.31	8.47	10.74
Net receipts per acre		4.82	11.63	-1.35
Value of land per acre		78	86	64
Total investment per acre		114	125	100
Acres in Corn		37.7	48.1	30.7
Oats		22.6	23.7	22.6
Wheat		15.1	11.9	19.1
Soybeans		4.7	7.4	3.5
Hay		27.4	25.7	34.1
Tillable pasture		25.8	30.0	27.5
Crop yields--Corn, bu. per acre		23.4	31.9	12.9
Oats, bu. per acre		8.9	10.4	4.1
Wheat, bu. per acre		11.5	18.7	8.5
Soybeans, bu. per acre		21.6	25.9	14.2
Value of feed fed to productive L.S.		1 400	1 261	1 652
Returns per $100 of feed fed to productive livestock		141	172	115
Returns per $100 invested in:				
Cattle		80	83	58
Poultry		264	284	216
Pigs weaned per litter		6.1	6.2	6.4
Income per litter farrowed		92	97	90
Dairy sales per dairy cow		43	39	40
Investment in productive L.S. per A.		6.03	7.27	5.76
Receipts from productive L.S. per A.		9.81	10.80	8.55
Man labor cost per crop acre		6.84	6.89	7.15
Machinery cost per crop acre		2.50	2.28	3.02
Power and mach. cost per crop A.		4.00	3.56	4.81
Farms with tractor		82%	100%	54%
Value of feed fed to horses		210	166	281
Man labor cost per $100 gross income		31	21	41
Expenses per $100 gross income		63	42	114
Farm improvements cost per acre		.94	.78	1.20
Excess of sales over cash expenses		1 415	2 094	956
Increase in inventory		298	991	-448
Rate earned on investment		4.22%	9.31%	-1.34%
Gross receipts per farm		2 638	4 045	2 078

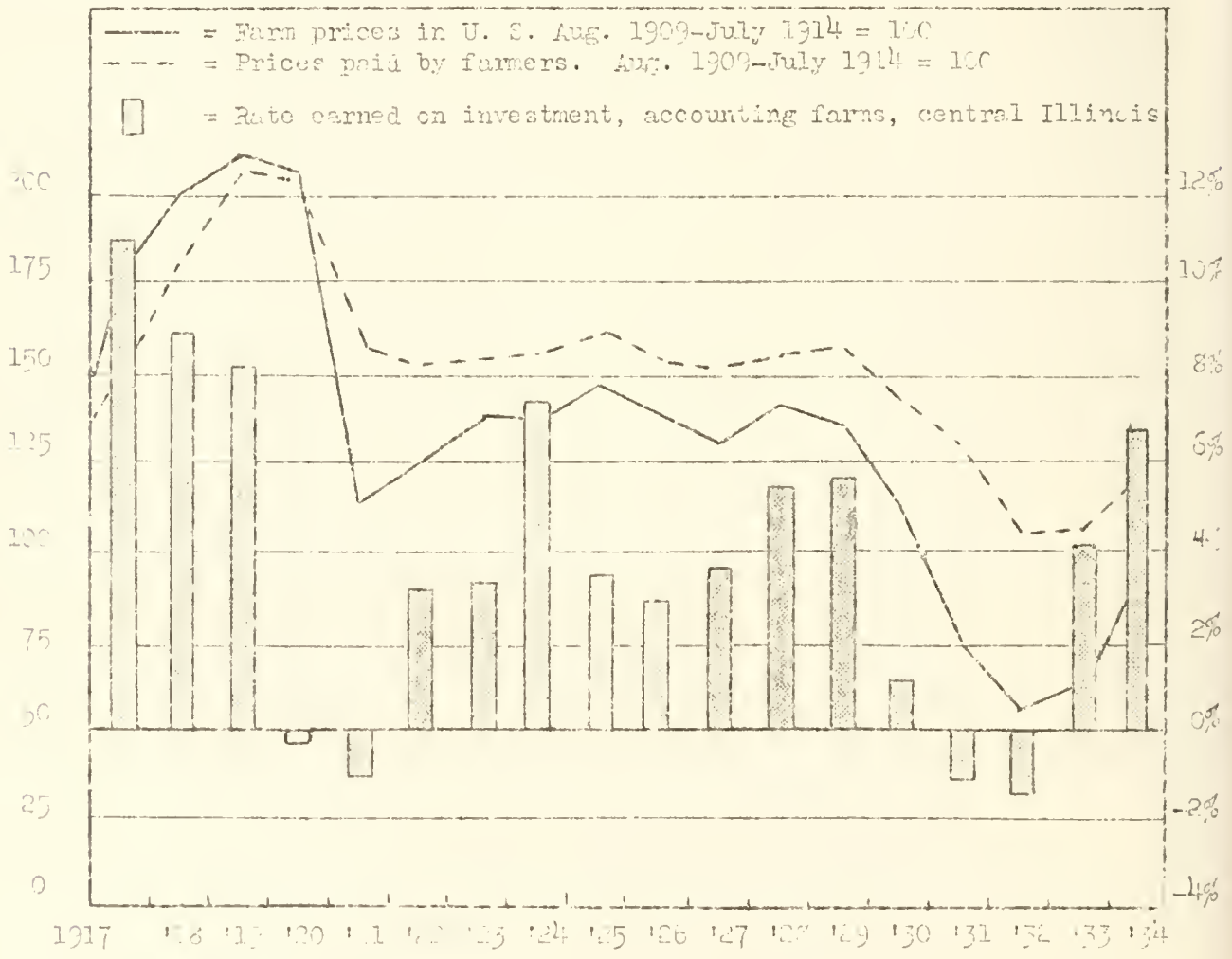
Chart for Studying the Efficiency of Various Parts of Your Business, Peoria, Schuyler, and Fulton Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 39 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
14.22	43	24	32	167	68	464	216	.84	--	6	2300	2915	23	6400	400
12.22	39	21	28	152	63	424	201	2.04	0	11	2300	2615	21	5650	360
10.22	35	18	24	137	58	384	186	3.24	1.00	16	1800	2315	19	4900	320
8.22	31	15	20	122	53	344	171	4.44	2.00	21	1300	2015	17	4150	280
6.22	27	12	16	107	48	304	156	5.64	3.00	26	800	1715	15	3400	240
4.22	23.4	8.9	11.5	92	43	264	141	6.84	4.00	31	298	1415	13.13	2638	200.8
2.22	19	6	8	77	38	224	126	8.04	5.00	36	-200	1115	11	1900	160
.22	15	3	4	62	33	184	111	9.24	6.00	41	-700	815	9	1150	120
-1.78	11	0	0	47	28	144	96	10.44	7.00	46	-1200	515	7	400	80
-3.78	7	--	--	32	23	104	81	11.64	8.00	51	-1700	215	5	--	40
-5.78	3	--	--	17	18	64	66	12.84	9.00	56	-2200	--	3	--	0

Influence of Price Changes on Farm Earnings

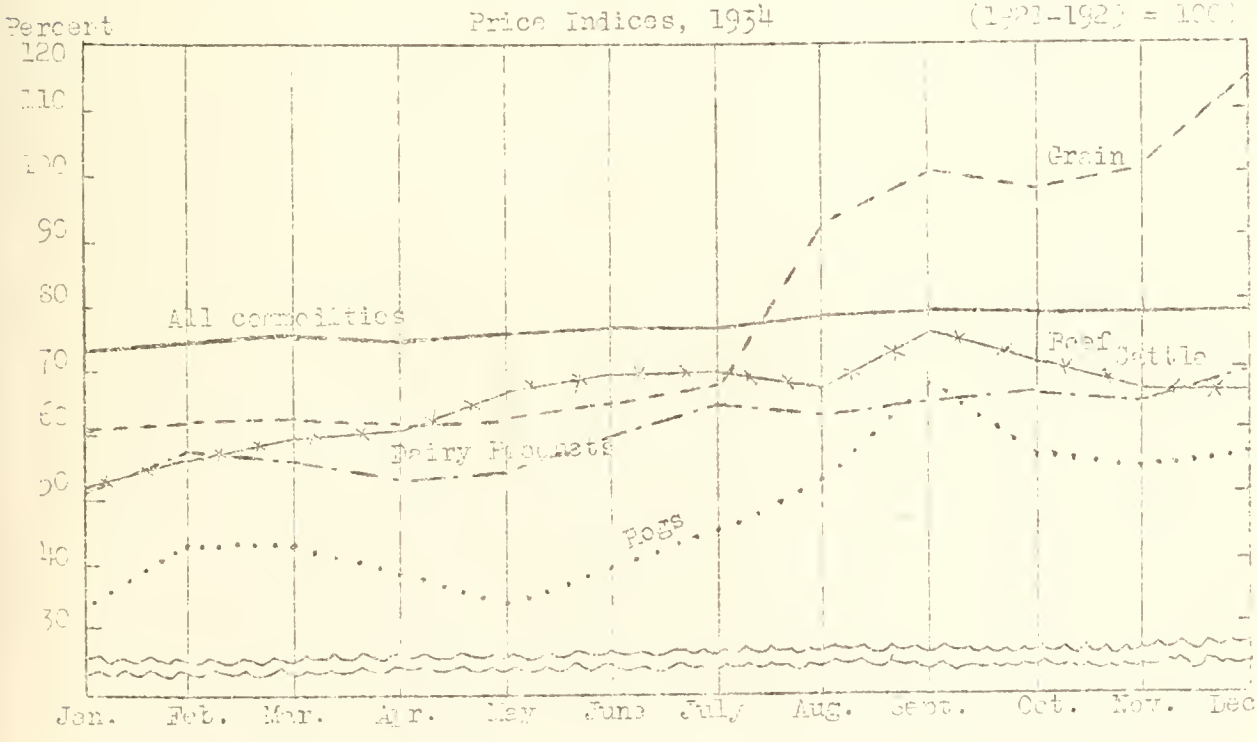
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.30 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $3.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.4 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 14 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics. Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Peoria, Schuyler, and Fulton Counties for the last five years is very interesting because of the violent fluctuations in the price level. Although the 1934 crop was nearly a failure and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Peoria, Schuyler, and Fulton Counties for 1930-1934

Items	1930	1931	1932	1933 1/	1934
Number of farms	52	46	30	36	39
Average size of farms, acres	218	220	202	212	201
Average rate earned, to pay for management, risk and capital	1.1%	-2.2%	-2.1%	5.4%	4.2%
Average labor and management wage	$-739	$-1 557	$-1 131	$621	$360
Gross income per acre	15.61	7.58	6.49	15.93	13.13
Operating cost per acre	13.83	10.52	8.91	8.53	8.31
Average value of land per acre	113	93	75	97	78
Total investment per acre	166	136	115	138	114
Investment per farm in:					
Total livestock	3 455	2 622	1 737	1 849	1 587
Cattle	1 618	1 021	741	796	630
Hogs	1 090	932	502	501	485
Poultry	123	118	90	64	73
Gross income per farm	3 399	1 668	1 314	3 386	2 638
Income per farm from:					
Crops	---	---	---	1 341	538
Miscellaneous income	82	103	61	120	6
Total livestock	3 317	1 565	1 253	1 925	2 003
Cattle	525	34	72	171	309
Dairy sales	432	269	234	280	192
Hogs	2 160	1 092	811	1 260	1 207
Poultry	190	145	114	103	84
Average yield of corn in bu.	29	44	58	44	23
Average yield of oats in bu.	31	40	45	30	9

1/ Records from Peoria, Stark, and Fulton Counties for 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-SIX FARMS IN MACON COUNTY, ILLINOIS, 1934

P. E. Johnston, J. Ackerman, and J. B. Andrews*

The farm earnings of 36 account-keeping farmers in Macon County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 36 accounts show for 1934 an average net income of $2,377 per farm, as compared with an average of $1,680 in 1933 and an average net loss of $609 in 1932. The average cash income in 1934 was $5,078 per farm, the cash business expenditures $2,264 per farm, leaving a cash balance of $2,814 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $701 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,515 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* J. R. Gilkey, farm adviser in Macon County cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 36 accounting farms the most successful third shows an average net income of $4,218 while the average net income of the least successful third of the farms was only $1,535. In 1933 the comparable net incomes for the two groups was $2,714, and $421 respectively.

Investments, Receipts, Expenses and Earnings on 36
Macon County Farms in 1934

Items	Your farm	Average of 36 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		31 223	27 453	33 338
Farm improvements		4 950	3 812	7 009
Livestock total		1 604	1 297	2 142
Horses		352	354	376
Cattle		965	582	1 499
Hogs		173	202	169
Sheep		23	22	42
Poultry		91	137	56
Machinery and equipment		1 510	1 364	1 802
Feed and grains		1 942	2 143	1 737
Total capital investment	$	$41 229	$36 069	$46 028
RECEIPTS AND NET INCREASES				
Livestock total		1 583	2 158	1 563
Horses		11	15	22
Cattle		482	541	693
Hogs (including AAA payments)		572	844	462
Sheep		26	13	60
Poultry		86	152	44
Egg sales		111	198	62
Dairy sales		295	395	220
Feed and grains (including AAA payments)		3 308	3 881	2 314
Labor off farm		101	121	44
Miscellaneous receipts		3	---	6
Total receipts & net increases	$	$ 4 995	$ 6 160	$ 3 927
EXPENSES AND NET DECREASES				
Farm improvements		209	176	269
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		371	304	495
Feed and grains		---	---	---
Livestock expense		27	40	18
Crop expense		200	180	200
Hired labor		264	193	341
Taxes		386	370	440
Miscellaneous expenses		23	21	22
Total expenses & net decreases	$	$ 1 480	$ 1 284	$ 1 785
RECEIPTS LESS EXPENSES	$	$ 3 515	$ 4 876	$ 2 142
Total unpaid labor		638	658	607
Operator's labor		507	540	495
Family labor		131	118	112
Net income from investment and management		2 877	4 218	1 535
RATE EARNED ON INVESTMENT	%	6.98%	11.70%	3.33%
Return to capital and operator's labor and management		3 334	4 758	2 030
5% of capital invested		2 061	1 803	2 301
LABOR AND MANAGEMENT WAGE	$	$ 1 323	$ 2 955	$ -271

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$25 and over	3	$13	5
23	1	11	3
21	2	9	5
19	2	7	3
17	3	5	1
15	3	3 and under	5

A further study of the farm businesses, made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest net incomes, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 223 acres each, the least successful 278 acres. The most successful farms carried larger inventories of feed and grains, and hence had a larger investment in this account than either the least successful farms, or the average of all farms. The investment in land, improvements, total livestock, and machinery and equipment was smaller on the most successful farms than for the other two groups. Difference in receipts from the sale of grains, hogs, and dairy products accounts for most of the difference in income between the most profitable, and the least profitable farms. The total expenses per acre, including the charge for family labor, was practically the same for both groups of farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 905	1 898
Average of 12 most successful farms	3 554	2 650
Average of 12 least successful farms	2 171	1 264
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and at the end of the year. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Macon County was $701, as compared with an increase of $555 in 1933, and an inventory loss of $1,021 per farm in 1932. There were increases of $7 in total livestock, $670 in feed and grain, and $49 in machinery. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$ 1 604	$ 1 611	$ 7	$
Feed and grains	1 942	2 612	670	
Machinery	1 510	1 559	49	
Improvements (except residence)	4 950	4 925	-25	
Total	$10 006	$10 707	$701	$

Some Adjustments on Macon County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 77 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,264 per farm in 1934, as compared with $1,741 in 1933. The largest increases in expenditures over the previous year were for improvements, and machinery and repairs for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed repair and replacements of machinery and improvements during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Macon County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 262	$ 756	$	$1 838	$3 334
Feed and grains		318	509		2 956	3 542
Machinery		598	917		178	146
Improvements		186	346		2	---
Labor		264	498		101	36
Miscellaneous		23	36		3	14
Livestock expense		27	40		---	---
Crop expense		200	273		---	---
Taxes		386	445		---	---
Total	$	$2 264	$3 820	$	$5 078	$7 072
Excess of cash sales over expenses					$2 814	$3 252
Increase in inventory					701	530
Income to labor and capital (Receipts less expenses)					3 515	3 782

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 72 percent of that in 1929, cash expenditures were only 59 percent as large. In 1934 livestock purchases were 35 percent, and feed and grain purchases 62 percent as large as in 1929. In 1934 these farms paid out 65 percent as much for machinery, and 73 percent as much for crop expense as in 1929, while taxes were reduced to 87 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $18.92, as compared with $5.53 per acre for the least profitable farms. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were 55 acres smaller in size, but they had only 7.9 fewer crop acres than the least profitable farms. They had about the same acreage of soybeans, 5.4 acres more wheat, 9.6 acres more oats and 14.1 fewer acres of corn than the least profitable farms. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. They had an inventory increase in the feed and grain account of $1,089, as compared with $489 on the least profitable farms. Since acreages of crops on the two groups of farms where similar, one reason for the larger inventories was the higher crop yields, there being an advantage of 11.9 bushels of corn, 10.7 bushels of oats, 11.4 bushels of wheat, and 9.4 bushels of soybeans in favor of the most profitable farms.

The most profitable farms had an investment in productive livestock of $5.06 per acre, and fed $1,512 of feed per farm, as compared with $5.66 invested per acre, and $1,439 of feed fed per farm on the least profitable farms. The receipts from livestock on the most profitable farms were $9.61 per acre, as compared with $5.55 per acre on the least profitable farms The productive livestock on the most profitable farms returned $146 for each $100 of feed fed, as compared with a return of $107 for each $100 of feed fed, on the least profitable farms. The dairy sales per dairy cow was $60 on the most profitable farms, and $39 on the least profitable farms. The return per litter farrowed on the most profitable farms was $104 as compared with $94 on the least profitable farms.

The total operating costs per acre were about the same for the two groups of farms. The man labor cost per crop acre was $4.42 on the most profitable farms, and $4.70 on the least profitable farms. The cost of power and machinery per crop acre amounted to $2.73 on the most profitable farms, and $3.71 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	11	$153	9	$151	10	$125	$358
1/3 least profitable farms	10	115	4	92	8	84	182
All accounting farms	32	140	17	135	28	88	257

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average for all accounting farms, the payments actually received were sufficient to pay 67 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 23.3 contracted acres which were used as follows: 5.3 idle; 8.3 mixed clover and timothy; 5.5 soybeans; 1.5 alfalfa; and 2.7 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program, there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 36
Macon County Farms in 1934

Items	Your farm	Average of 36 farms	12 most profitable farms	12 least profitabl farms
Size of farms--acres		248.7	222.9	277.7
Percent of land area tillable		90.9	95.6	86.4
Percent of tillable land in hay and pasture		26.8	25.5	33.3
Gross receipts per acre		$ 20.08	$ 27.64	$ 14.14
Total expenses per acre		8.51	8.71	8.61
Net receipts per acre		11.57	18.92	5.53
Value of land per acre		126	123	120
Total investment per acre		166	162	166
Acres in Corn		71.7	64.4	78.5
Oats		24.1	26.1	16.5
Wheat		26.4	26.2	20.8
Soybeans		34.9	36.0	36.9
Hay		25.6	25.6	32.2
Tillable pasture		35.0	28.7	47.7
Crop yields--Corn, bu. per acre		29.1	36.1	24.2
Oats, bu. per acre		13.5	17.6	6.9
Wheat, bu. per acre		27.2	30.2	18.8
Soybeans, bu. per acre		26.9	30.4	21.0
Value of feed fed to productive L.S.		1 235	1 512	1 439
Returns per $100 of feed fed to productive livestock		127	142	107
Returns per $100 invested in:				
Cattle		85	146	70
Poultry		221	243	208
Pigs weaned per litter		5.8	5.8	6.7
Income per litter farrowed		93	104	94
Dairy sales per dairy cow		56	60	39
Investment in productive L.S. per A.		5.01	5.06	5.66
Receipts from productive L.S. per A.		6.32	9.61	5.55
Man labor cost per crop acre		4.48	4.42	4.70
Machinery cost per crop acre		1.94	1.65	2.57
Power and mach. cost per crop A.		2.98	2.73	3.71
Farms with tractor		89%	92%	75%
Value of feed fed to horses		210	215	240
Man labor cost per $100 gross income		17	13	23
Expenses per $100 gross income		42	32	61
Farm improvements cost per acre		.84	.79	.97
Excess of sales over cash expenses		2 814	3 319	2 061
Increase in inventory		701	1 557	81
Rate earned on investment		6.98	11.70%	3.33%
Gross receipts per farm		4 995	6 160	3 927

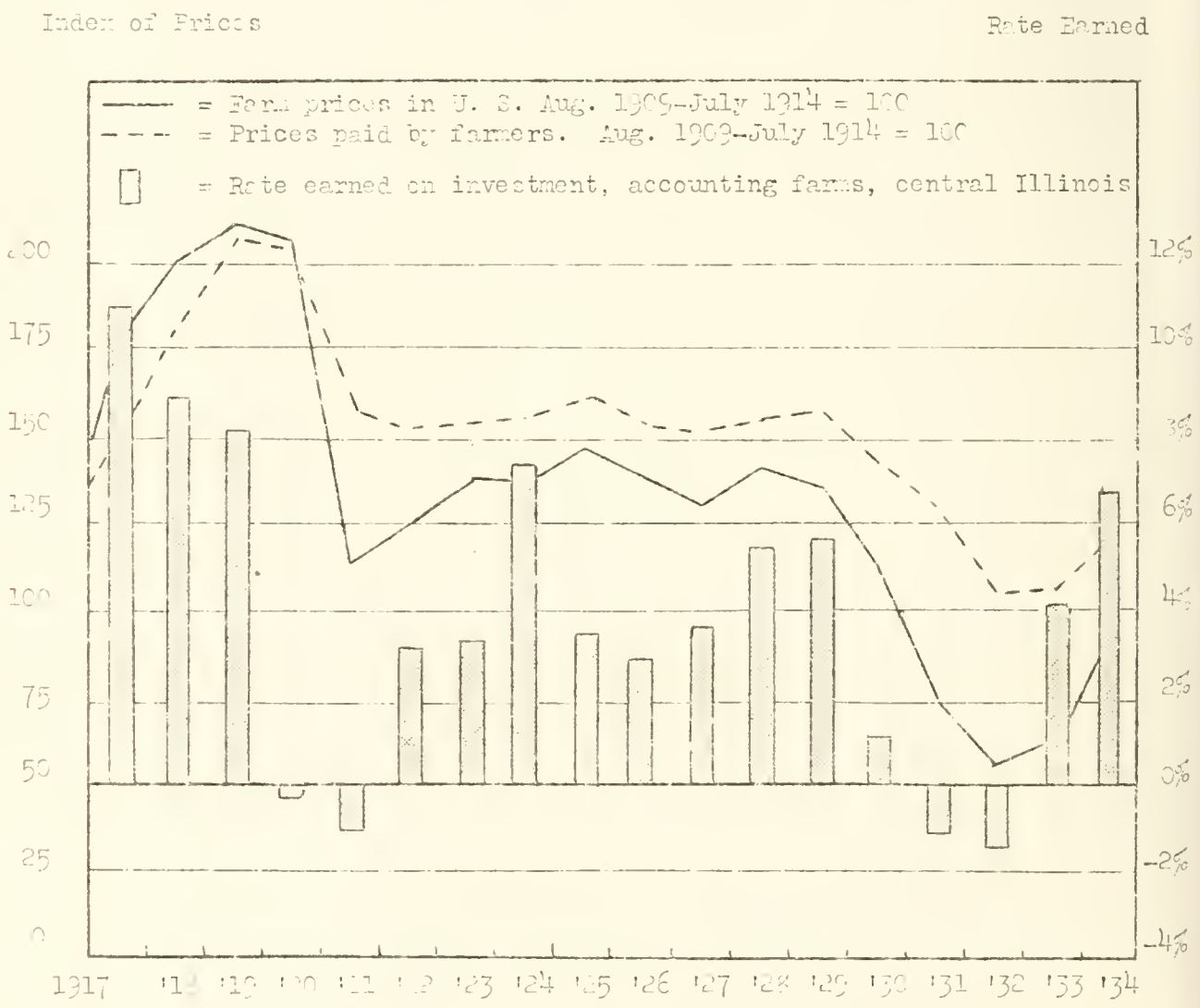
Chart for Studying the Efficiency of Various Parts of Your Business, Macon County, 1934

The numbers above the lines across the middle of the page are the averages for the 36 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Wheat	Soybeans					Labor	Power and machinery				Per acre	Per farm	
14.5	49	47	42	168	106	321	252	--	--	--	3700	6800	40	10000	550
13.0	45	43	39	153	86	301	227	--	--	--	3100	6000	36	9000	490
11.5	41	39	36	138	86	281	202	--	--	2	2500	5200	32	8000	430
10.0	37	35	33	123	76	261	177	1.48	.98	7	1900	4400	28	7000	370
8.5	33	31	30	108	66	241	152	2.98	1.98	12	1300	3600	24	6000	310
6.98	29.1	27.2	26.9	93	56	221	127	4.48	2.98	17	701	2814	20	4995	249
5.5	25	23	24	78	46	201	102	5.98	3.98	22	100	2000	16	4000	190
4.0	21	19	21	63	36	181	77	7.48	4.98	27	-500	1200	12	3000	130
2.5	17	15	18	48	26	161	52	8.98	5.98	32	-1100	400	8	2000	70
1.0	13	11	15	33	16	141	27	10.48	6.98	37	-1700	--	4	1000	10
-.5	9	7	12	18	6	121	2	11.98	7.98	42	-2300	--	--	--	--

Influence of Price Changes on Farm Earnings

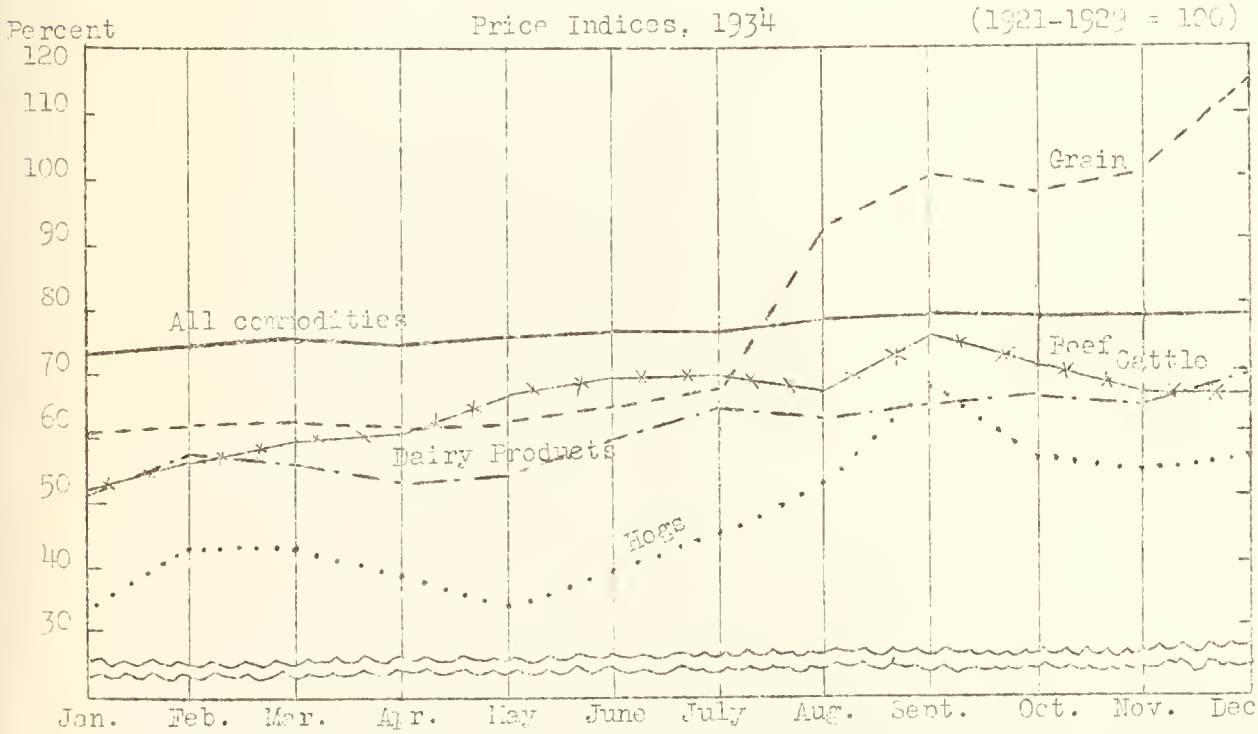
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 77 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.4 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Macon County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 85 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Macon County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	56	32	53	30	36
Average size of farms, acres	248	227	251	260	249
Average rate earned, to pay for management, risk and capital	1.5%	-1.3%	-1.4%	3.7%	7.0%
Average labor and management wage	$-1 290	$-2 506	$-2 211	$-58	$1 323
Gross income per acre	16.26	7.66	6.13	14.21	20.08
Operating cost per acre	12.92	10.49	8.56	7.74	8.51
Average value of land per acre	173	163	132	136	126
Total investment per acre	228	214	169	173	166
Investment per farm in:					
Total livestock	2 907	2 362	1 685	1 818	1 604
Cattle	1 421	1 227	813	1 044	965
Hogs	628	452	292	211	173
Poultry	131	142	103	111	91
Gross income per farm	4 040	1 741	1 539	3 692	4 995
Income per farm from:					
Crops	1 798	355	510	2 395	3 308
Miscellaneous income	72	89	52	52	3
Total livestock	2 170	1 297	977	1 245	1 583
Cattle	483	428	254	377	482
Dairy sales	354	295	284	209	295
Hogs	1 108	362	286	430	572
Poultry	220	211	141	209	86
Average yield of corn in bu.	40	45	56	22	29
Average yield of oats in bu.	38	46	49	20	14
Average yield of wheat in bu.	24	31	19	24	27

ANNUAL FARM BUSINESS REPORT ON THIRTY-NINE FARMS IN FORD COUNTY, ILLINOIS, 1934

F. E. Johnston, R. C. Ross, and T. R. Hedges*

The farm earnings of 39 account-keeping farmers in Ford County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 39 accounts show for 1934 an average net income of $2,618 per farm, as compared with an average of $1,637 in 1933 and an average net loss of $838 in 1932. The average cash income in 1934 was $4,745 per farm, the cash business expenditures $1,757 per farm, leaving a cash balance of $2,988 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income there was an inventory increase of $383 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,371 per farm. The inventory increase was a much smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average and were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corpora-

*H. D. Triblett, farm adviser in Ford County cooperated in supervising and collecting the records on which this report is based.

tions in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 39 accounting farms the most successful third shows an average net income of $4,670; the average net income of the least successful third of the farms was only $794. In 1933 the comparable net incomes for the two groups was $2,569 and $724 respectively.

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19	2	$7	5
17	4	5	3
15	2	3	6
13	4	1	2
11	5	-1	2
9	4		

Investments, Receipts, Expenses, and Earnings on
39 Ford County Farms

Items	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		33 790	42 065	23 692
Farm improvements		4 494	5 461	3 079
Livestock total		1 614	1 824	1 385
Horses		606	713	507
Cattle		694	766	594
Hogs		188	232	130
Sheep		28	12	47
Poultry		98	101	107
Machinery and equipment		1 525	1 494	1 647
Feed, grain and supplies		2 614	3 513	1 960
Total capital investment	$	$44 037	$54 357	$31 763
RECEIPTS AND NET INCREASES				
Livestock total	$	1 598	2 171	1 083
Horses		71	105	42
Cattle		340	394	303
Hogs (includes AAA payments)		591	866	340
Sheep		43	13	84
Poultry		107	134	68
Egg sales		141	196	110
Dairy sales		305	463	136
Feed and grain (includes AAA payments)		2 978	4 678	1 518
Labor off farm		108	127	50
Miscellaneous receipts		2	2	2
Total receipts & net increases	$	$ 4 686	$ 6 978	$ 2 653
EXPENSES AND NET DECREASES				
Farm improvements		277	343	193
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		346	304	384
Feed, grain and supplies		---	---	---
Livestock expense		35	45	23
Crop expense		134	166	101
Hired labor		189	294	69
Taxes		306	320	298
Miscellaneous expenses		28	29	20
Total expenses & net decreases	$	$ 1 315	$ 1 501	$ 1 088
RECEIPTS LESS EXPENSES	$	$ 3 371	$ 5 477	$ 1 565
Total unpaid labor		753	807	771
Operator's labor		536	540	540
Family labor		217	267	231
Net income from investment and management		2 618	4 670	794
RATE EARNED ON INVESTMENT	%	5.94%	8.59%	2.41%
Return to capital and operator's labor and management		3 154	5 210	1 334
5% of capital invested		2 202	2 718	1 588
LABOR AND MANAGEMENT WAGE	$	$ 952	$ 2 492	$ - 254

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 307 acres each, the least successful 241 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sale of grains accounts for much of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	4 499	2 320
Average of 13 most successful farms .	6 431	3 390
Average of 13 least successful farms.	3 256	1 068
Your farm.		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year; which accounts in a large measure for the difference in farm earnings.

The average inventory increase for the accounting farms in Ford County was $383 in 1934 as compared with $960 in 1933 and an inventory loss of $1,045 a farm in 1932. There were increases of $159 in total livestock, $389 in feed and grain, and $24 in machinery, while improvements showed a decrease of $189. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 614	$1 773	$159	$
Feed and grain	2 614	3 003	389	
Machinery	1 525	1 549	24	
Improvements (except residence)	4 494	4 305	-189	
Total	$10 247	$10 630	$383	

Some Adjustments on Ford County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 38 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,757 a farm in 1934 as compared with $1,492 in 1933. The largest increase in expenditures over the previous year was for machinery and supplies for machinery. Indications point to an even greater expansion of spending for these items in 1935 since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Ford County
1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 328	$ 451	$	$1 767	$2 941
Feed and grain		141	363		2 730	3 497
Machinery		493	1 075		123	142
Improvements		103	384		15	---
Labor		189	554		108	78
Miscellaneous		28	33		2	5
Livestock expense		35	47		---	---
Crop expense		134	292		---	---
Taxes		306	466		---	---
Total	$	$1 757	$3 665	$	$4 745	$6 663
Excess of cash sales over expenses					$2 988	$2 998
Increase in inventory					383	1 156
Income to labor and capital (receipts less expenses)					3 371	4 154

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 71 percent of that in 1929, cash expenditures were only half as large. In 1934 livestock purchases were 73 percent and feed and grain purchases 39 percent as large as in 1929. In 1934 these farms paid out 45 percent as much for machinery and 46 percent as much for crop expense as in 1929, while taxes were reduced to only 66 percent of the 1929 level.

Comparison of Farm With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $15.21 as compared with $3.30 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were larger and carried larger inventories on which to make a profit when prices advanced. One reason for the larger inventories, however, was the higher crop yields, there being an advantage of 17.3 bushels of corn and 6.6 bushels of oats per acre in favor of the high-profit group. Crop yields were so low on the least profitable farms that there was an average inventory loss of $302 per farm in spite of the price advance.

Although there was about the same amount of livestock per acre on the farms in the two groups there was a difference in the income of $2.41 an acre in favor of the most profitable farms. The returns for each $100 of feed fed to livestock was $156 as compared with $120.

The total operating costs on the acre basis were slightly higher on the least profitable farms. The power and machinery cost was an important factor in accounting for this difference.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	13	$217	3	$138	11	$135	$363
1/3 least profitable farms	13	113	1	22	11	66	171
All accounting farms	39	160	5	100	35	94	257

1/ Total benefit payments for accounting farms under contract for 1934, divided by the total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 84 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 27.5 contracted acres which were used as follows: 4.8 idle; 4.5 red clover; 8.3 sweet clover; 5.3 soybeans; 2.9 alfalfa; and 1.7 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as most of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
39 Ford County Farms in 1934

Items	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		270.8	307	240.9
Percent of land area tillable		94.2	95.4	94.6
Percent of tillable land in hay & pasture		26.8	27.0	26.1
Gross receipts per acre		17.30	22.73	11.01
Total expenses per acre		7.64	7.52	7.71
Net receipts per acre		9.66	15.21	3.30
Value of land per acre		125	137	98
Total investment per acre		163	177	132
Acres in Corn		91.8	111.8	79.7
Oats		71.0	69.7	72.3
Wheat		3.3	7.7	.5
Soybeans		8.8	6.9	7.9
Hay		21.8	24.4	16.4
Tillable Pasture		47.0	54.7	43.4
Crop yields--Corn, bu. per acre		29.4	36.5	19.2
Oats, bu. per acre		13.0	15.4	8.8
Value of feed fed to productive L.S.		1 141	1 323	865
Returns per $100 of feed fed to productive livestock		142	156	120
Returns per $100 invested in:				
Cattle		90	120	71
Poultry		230	280	168
Pigs weaned per litter		6.0	6.4	5.8
Income per litter farrowed		94	100	81
Dairy sales per dairy cow		51	58	34
Investment in productive L.S. per A.		3.99	3.93	3.92
Receipts from productive L.S. per A.		5.66	6.73	4.32
Man labor cost per crop acre		4.27	4.38	4.23
Machinery cost per crop acre		1.66	1.23	2.08
Power and mach. cost per crop A.		2.42	1.93	2.90
Farms with tractor		92%	100%	77%
Value of feed fed to horses		230	262	193
Man labor cost per $100 gross income		19	16	30
Expenses per $100 gross income		44	33	70
Farm improvements cost per acre		1.02	1.12	.80
Excess of sales over cash expenses		2 988	4 773	1 867
Increase in inventory		383	704	-302
Rate earned on investment		5.94	8.59	2.41
Gross receipts per farm		4 686	6 973	2 653

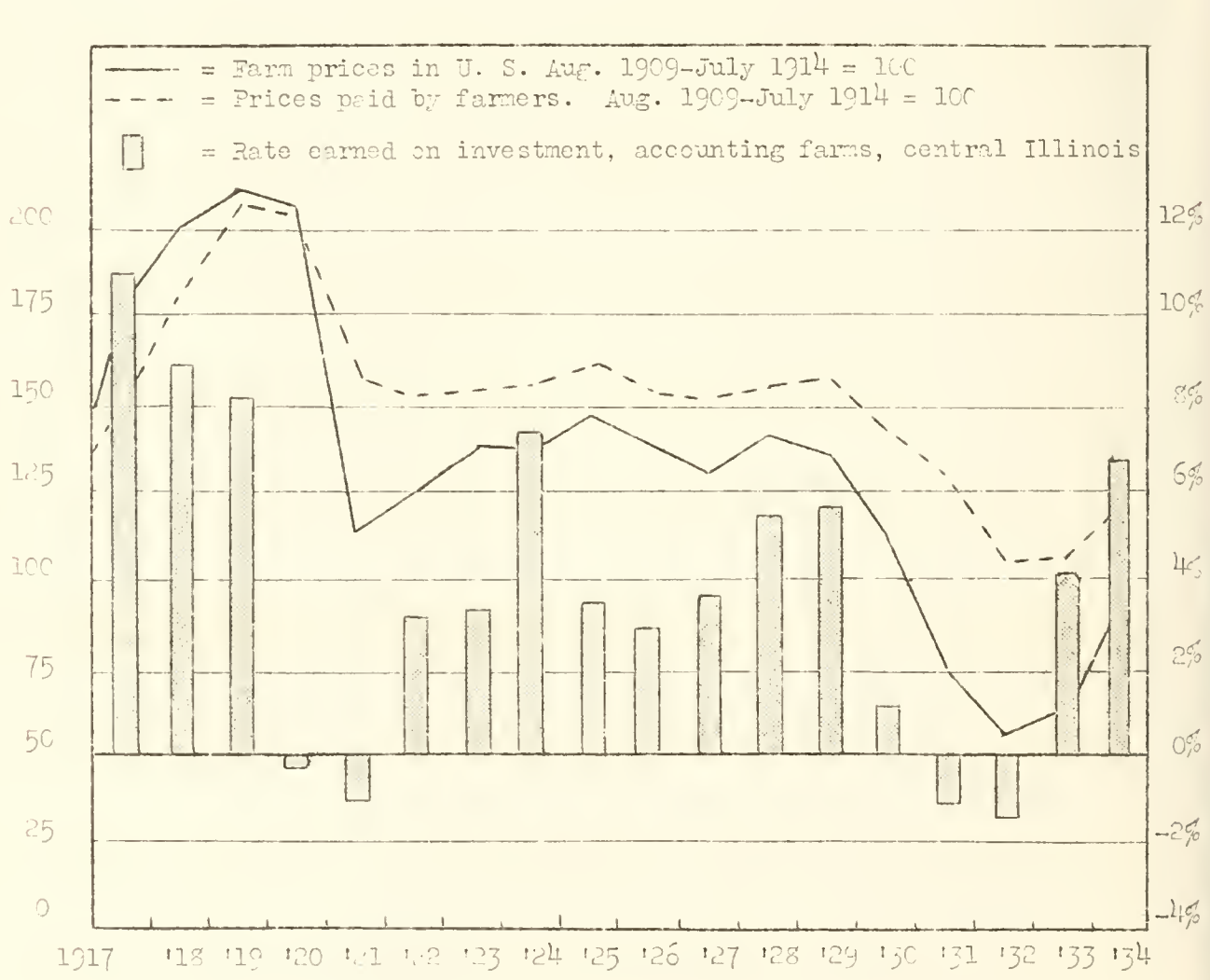
Chart for Studying the Efficiency of Various Parts of Your Business,
Ford County, 1934

The numbers above the lines across the middle of the page are the averages for the 39 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats						Labor	Power and machinery				Per acre	Per farm	
11	35	28		120	75	430	190	1.80	.40	---	2400	8000	32	9600	520
10	50	25		115	70	390	180	2.30	.80	0	2000	7000	29	8600	470
9	45	22		110	65	350	170	2.80	1.20	5	1600	6000	26	7600	420
8	40	19		105	60	310	160	3.30	1.60	10	1200	5000	23	6600	370
7	35	16		100	55	270	150	3.80	2.00	15	800	4000	20	5600	320
5.94	29.4	13.0		94	51	230	142	4.27	2.42	19	383	2988	17	4686	271
5	25	10		90	45	190	130	4.80	2.80	25	0	2000	14	3600	220
4	20	7		85	40	150	120	5.30	3.20	30	-400	1000	11	2600	170
3	15	4		80	35	110	110	5.80	3.60	35	-800	0	8	1600	120
2	10	1		75	30	70	100	6.30	4.00	40	-1200	---	5	600	70
1	5	---		70	25	30	90	6.80	4.40	45	-1600	---	2	0	20

Influence of Price Changes on Farm Earnings

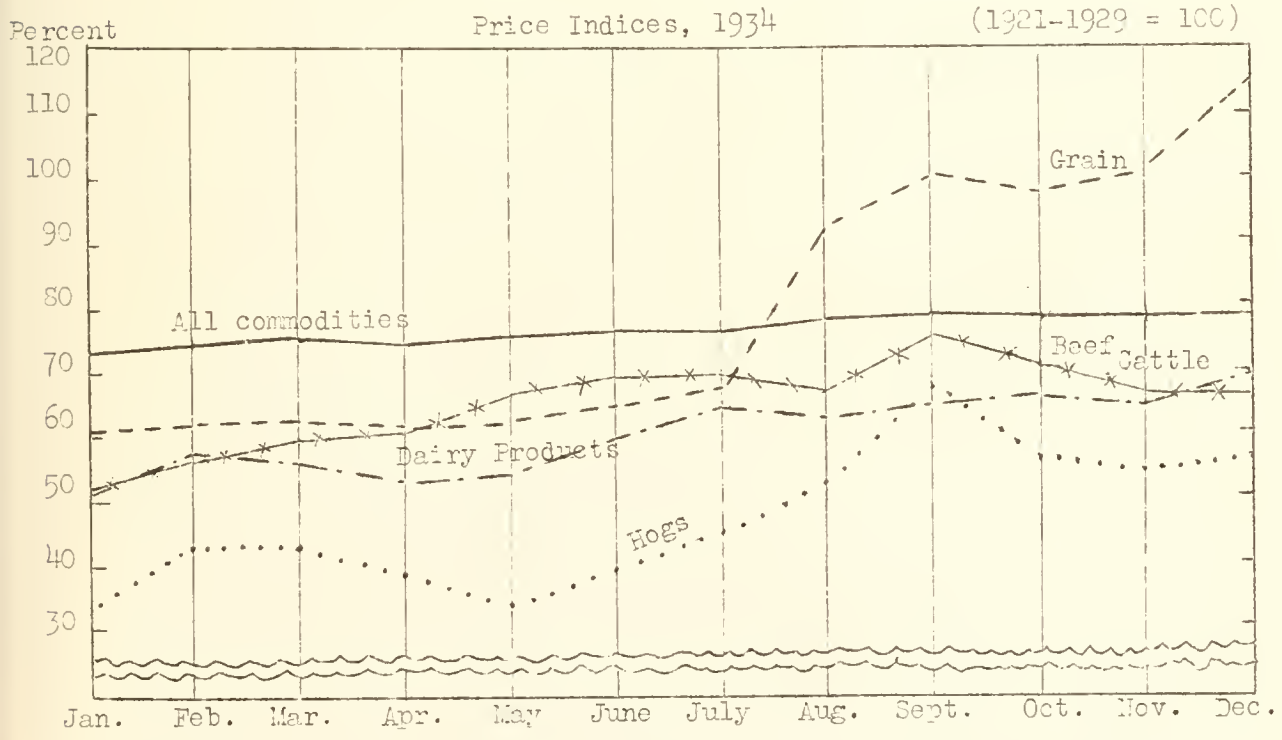
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production income and expenditures on the accounting farms in Ford County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five and were 72 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Ford County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	32	33	30	32	39
Average size of farms, acres	264	275	264	282	271
Average rate earned, to pay for management, risk and capital	2.0%	0.1%	-1.9%	3.6%	5.
Average labor and management wage	$-1 141	$-2 269	$-2 557	$-94	$952
Gross income per acre	15.62	9.62	4.96	13.06	17.
Operating cost per acre	10.90	9.38	8.13	7.26	7.
Average value of land per acre	135	171	132	129	125.
Total investment per acre	231	211	171	161	163
Investment per farm in:					
Total livestock	2 244	2 214	1 896	1 660	1 614
Cattle	965	976	785	759	694
Hogs	372	387	280	191	188
Poultry	138	137	130	115	98
Total receipts per farm	4 116	2 650	1 311	3 638	4 686
Income per farm from:					
Crops	2 287	1 462	269	2 520	2 978
Miscellaneous income	119	33	74	15	2
Total livestock	1 710	1 155	968	1 153	1 598
Cattle	222	108	119	304	340
Dairy sales	506	409	291	206	305
Hogs	741	451	362	420	591
Poultry	200	182	169	166	107
Average yield of corn in bu.	35	44	50	32	29
Average yield of oats in bu.	30	47	42	19	13

ANNUAL FARM BUSINESS REPORT ON THIRTY-ONE FARMS IN IROQUOIS COUNTY, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and A. L. Leonard*

The farm earnings of 31 account-keeping farmers in Iroquois County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 31 accounts show for 1934 an average net income of $1,753 per farm, as compared with an average of $1,637 in 1933 and an average net loss of $838 in 1932. The average cash income in 1934 was $4,245 per farm, the cash business expenditures $1,838 per farm, leaving a cash balance of $2,407 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $134 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,541 per farm. The inventory increase was a much smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*C. E. Johnson, farm adviser in Iroquois County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 31 accounting farms the most successful third shows an average net income of $2,685, while the average net income of the least successful third of the farms was only $695. Figured on a cash basis the most successful farms had on an average $1,881 more cash income left to meet interest payments and family living than did the least successful farms. In 1933 the comparable net incomes for the two groups was $2,428 and $-19 respectively.

Investments, Receipts, Expenses and Earnings on 31
Iroquois County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
CAPITAL INVESTMENTS				
Land		27 435	27 021	25 570
Farm improvements		4 695	4 309	4 933
Livestock total		1 881	2 117	1 379
Horses		676	698	617
Cattle		736	809	511
Hogs		223	336	157
Sheep		155	190	6
Poultry		91	90	88
Machinery and equipment		1 540	1 302	1 540
Feed and grains		2 124	2 172	1 459
Total capital investment	$	$37 675	$36 921	$34 881
RECEIPTS AND NET INCREASES				
Livestock total		2 079	2 824	1 366
Horses		58	85	42
Cattle		550	848	254
Hogs (including AAA payments)		664	730	572
Sheep		89	87	6
Poultry		105	119	49
Egg sales		129	108	133
Dairy sales		484	797	310
Feed and grains (including AAA payments)		1 595	1 664	1 325
Labor off farm		111	210	15
Miscellaneous receipts		2	---	3
Total receipts & net increases	$	$ 3 787	$ 4 698	$ 2 709
EXPENSES AND NET DECREASES				
Farm improvements		240	231	268
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		299	255	271
Feed and grains		---	---	---
Livestock expense		50	68	22
Crop expense		131	127	127
Hired labor		189	288	113
Taxes		311	344	317
Miscellaneous expenses		26	27	24
Total expenses & net decreases	$	$ 1 246	$ 1 340	$ 1 142
RECEIPTS LESS EXPENSES	$	$ 2 541	$ 3 358	$ 1 567
Total unpaid labor		788	673	872
Operator's labor		517	540	468
Family labor		271	133	404
Net income from investment and management		1 753	2 685	695
RATE EARNED ON INVESTMENT	%	4.65%	7.27%	1.99%
Return to capital and operator's labor and management		2 270	3 225	1 163
% of capital invested		1 884	1 846	1 744
LABOR AND MANAGEMENT WAGE	$	$ 386	$ 1 379	$ -581

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15.	3	$5.	8
13.	0	3.	3
11.	6	1.	2
9.	4	-1.	1
7.	4		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms averaged 238 acres each and had an average capital investment of $36,921 per farm, as compared with 245 acres and $34,881 for the less profitable farms. The most profitable farms had 15 more acres of tillable land, and 16 more acres of crops per farm than the least profitable farms. The most successful group of farms secured average gross receipts of $4,693, while the least successful obtained $2,709. A difference of $1,458 in receipts and net increases from livestock accounts for a large part of this difference.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was exactly equal to that of the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	3 257	1 257
Average of 10 most successful farms . .	3 442	1 256
Average of 10 least successful farms. .	2 149	963
Your farm		

The average inventory increase for the accounting farms in Iroquois County was $134 in 1934 as compared with $617 in 1933, and an inventory loss of $940 a farm in 1932. There was an increase of $323 in the inventory of total livestock, while machinery showed a decrease of $59 and improvements a decrease of $130. Many farms show an increase in machinery inventory, which can be explained by the value of new replacements during the year being in excess of depreciation costs. Indications point to an expansion of spending for machinery and repairs in 1935, since farmers have postponed machinery replacements during the five-year period since 1929.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 881	$2 204	$323	$
Feed and grains	2 124	2 124	--	
Machinery	1 540	1 481	-59	
Improvements (except residence)	4 695	4 565	-130	
Total	$10 240	$10 374	$134	$

Some Adjustments on Iroquois County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1934 farm operating costs declined each year. Total operating expenses were 51 cents an acre lower in 1934 than in 1933, while cash operating expenses were $1,838 a farm in 1934 as compared with $1,238 in 1933. The largest increases in expenditures over the previous year were for livestock and feed and grain.

Cash Income and Expenses on Accounting Farms in Iroquois County 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 373	$ 451	$	$2 129	$2 941
Feed and grains		337	363		1 932	3 497
Machinery		311	1 075		71	142
Improvements		110	384		--	--
Labor		189	554		111	78
Miscellaneous		26	33		2	5
Livestock expense		50	47		--	--
Crop expense		131	292		--	--
Taxes		311	466		--	--
Total	$	$1 838	$3 665	$	$4 245	$6 663
Excess of cash sales over expenses				$	$2 407	$2 998
Increase in inventory					134	1 154
Income to labor and capital (Receipts less expenses)					2 541	4 152

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 64 percent of that in 1929, cash expenditures were only 50% as large. In 1934 livestock purchases were 83 percent, and feed and grain purchases 93 percent as large as in 1929. In 1934 these farms paid out 29 percent as much for machinery, and 45 percent as much for crop expense as in 1929, while taxes were reduced to only 67 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

After deducting total expenses and net decreases from income and net increases, there remained a net increase of $11.29 per acre for the most profitable farms as compared with $2.84 per acre for the least profitable group. For the most profitable group this was a return of 7.27 percent on the capital invested in the farm business; for the least profitable group this was a return of 1.99 percent. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

In Iroquois County the most successful farms secured higher crop yields; they raised 10.4 bushels more corn, 3 bushels more oats, and 7.3 bushels more soybeans per acre, than the least successful farms.

The total investment in productive livestock was $6.74 per acre on the most successful farms, as compared with $3.56 on the least successful farms. The receipts and net increases were $11.51, and $5.41 per acre, respectively. This difference in livestock efficiency is further illustrated by the fact that the returns per $100 of feed fed were $133 for the most profitable farms, as compared with $125 for the least successful farms. Dairy sales were $51 per cow higher, and income per litter farrowed $56 higher on the most profitable farms, than on the least profitable farms.

The higher yields and greater income secured from livestock on the most successful farms was accomplished with a total operating expense of only 23 cents per acre, above that on the least successful farms. The cost of power and machinery was 77 cents per crop acre lower, while man labor costs were $1.07 per crop acre lower for the most successful farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	9	$145	--	$--	10	$127	$257
1/3 least profitable farms	10	122	--	--	9	106	217
All accounting farms	29	127	1	70	30	110	228

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On some farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 73 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 21.2 contracted acres which were used as follows: 8.3 idle; 3.4 red clover; 2.6 sweet clover; 3.6 soybeans; .9 alfalfa; and 1.9 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as approximately one-half of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 31 Iroquois County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
Size of farms--acres	———	254.9	237.9	244.7
Percent of land area tillable	———	91.4	96.4	87.5
Percent of tillable land in hay and pasture	———	34.0	33.5	35.7
Gross receipts per acre	———	14.86	19.75	11.07
Total expenses per acre	———	7.98	8.46	8.23
Net receipts per acre	———	6.88	11.29	2.84
Value of land per acre	———	108	114	104
Total investment per acre	———	148	155	143
Acres in Corn	———	76.4	76.1	78.3
Oats	———	56.4	65.2	43.2
Wheat	———	1.2	---	---
Soybeans	———	8.5	3.5	7.9
Hay	———	29.6	29	27.8
Tillable pasture	———	49.6	47.9	48.4
Crop yields--Corn, bu. per acre	———	28.9	27.4	17
Oats, bu. per acre	———	15	16	13
Soybeans, bu. per acre	———	18.1	25.6	18.3
Value of feed fed to productive L.S.	———	1 520	2 064	1 053
Returns per $100 of feed fed to productive livestock	———	133	133	125
Returns per $100 invested in:				
Cattle	———	121	161	97
Poultry	———	244	223	212
Pigs weaned per litter	———	6	6.2	6.1
Income per litter farrowed	———	114	147	91
Dairy sales per dairy cow	———	65	91	40
Investment in productive L.S. per A.	———	5.33	6.74	3.56
Receipts from productive L.S. per A.	———	7.93	11.51	5.41
Man labor cost per crop acre	———	5.04	4.78	5.85
Machinery cost per crop acre	———	1.63	1.40	1.64
Power and mach. cost per crop A.	———	2.65	2.19	2.96
Farms with tractor	———	71%	60%	70%
Value of feed fed to horses	———	245	227	261
Man labor cost per $100 gross income	———	26	18	36
Expenses per $100 gross income	———	54	43	74
Farm improvements cost per acre	———	.94	.97	1.10
Excess of sales over cash expenses	———	2 407	3 211	1 330
Increase in inventory	———	134	147	237
Rate earned on investment	———	4.65%	7.27%	1.99%
Gross receipts per farm	———	3 787	4 698	2 709

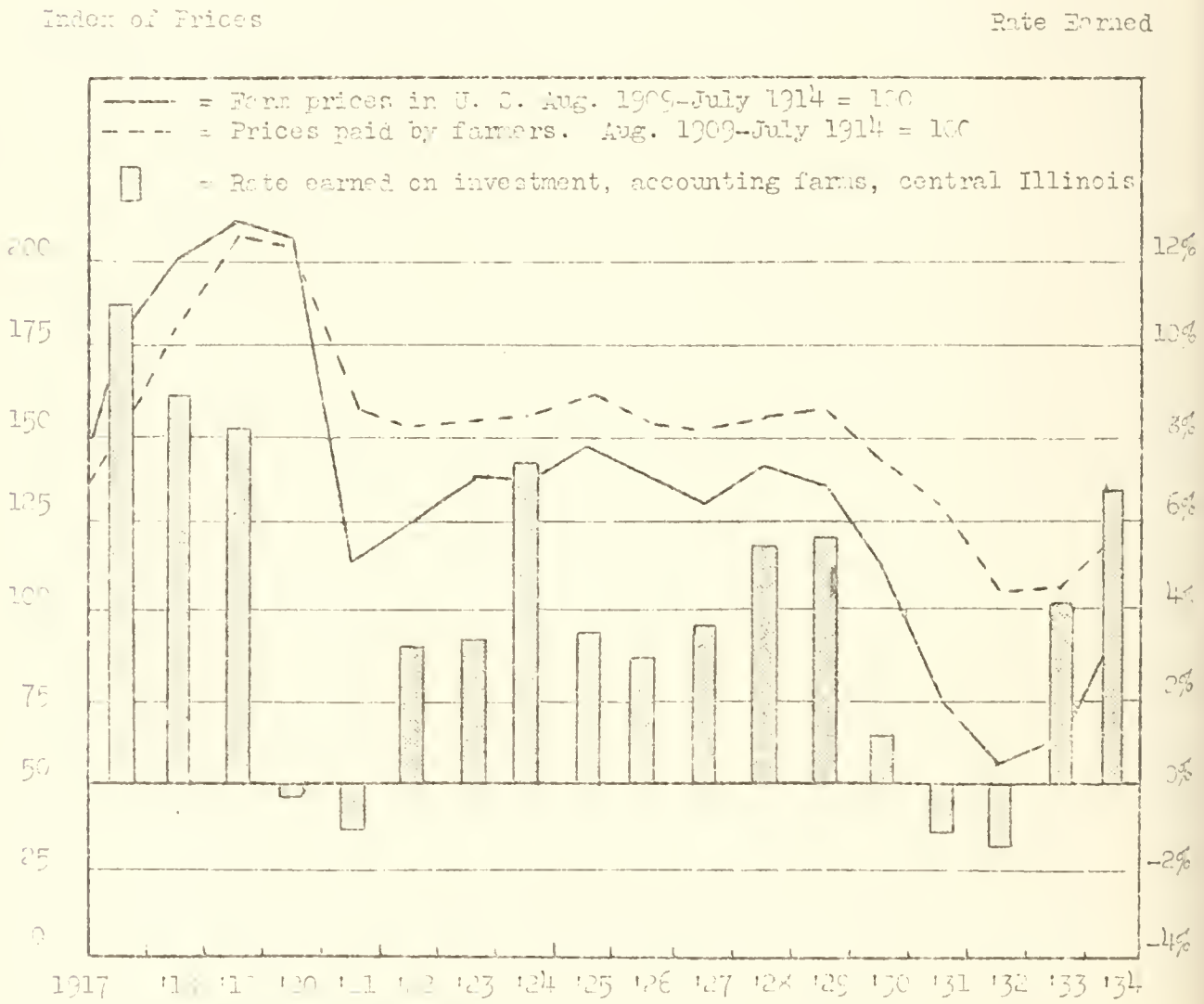
Chart for Studying the Efficiency of Various Parts of Your Business,
Iroquois County, 1934

The numbers above the lines across the middle of the page are the averages for the 31 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	U.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
9.65	43	35	28	164	100	394	233	.04	.15	--	2130	4900	30	7800	510
8.65	39	31	26	154	93	364	213	1.04	.65	2	1730	4400	27	7000	460
7.65	35	27	24	144	86	334	193	2.04	1.15	8	1330	3900	24	6200	410
6.65	31	23	22	134	79	304	173	3.04	1.65	14	930	3400	21	5400	360
5.65	27	19	20	124	72	274	153	4.04	2.15	20	530	2900	18	4600	310
4.65	22.9	15	18.1	114	65	244	133	5.04	2.65	26	134	2407	14.86	3787	255
3.65	19	11	16	104	58	214	113	6.04	3.15	32	-270	1900	12	3000	210
2.65	15	7	14	94	51	184	93	7.04	3.65	38	-670	1400	9	2200	160
1.65	11	3	12	84	44	154	73	8.04	4.15	44	-1070	900	6	1400	110
.65	7	--	10	74	37	124	53	9.04	4.65	50	-1470	400	3	600	60
-.35	3	--	8	64	30	94	33	10.04	5.15	56	-1870	-100	0	--	10

Influence of Price Changes on Farm Earnings

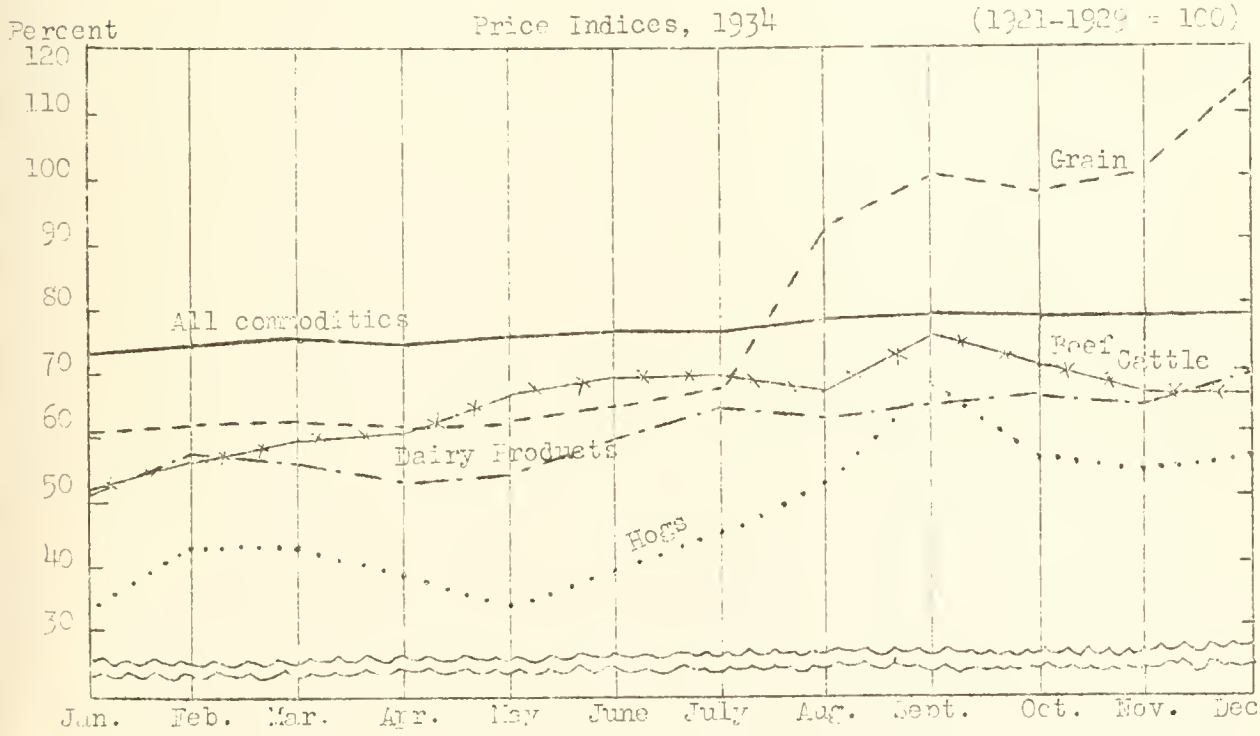
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Iroquois County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of low crop yields, yet total receipts per farm were higher than in any other year in the last five and were 59 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five. Thus profits were the best the county had experienced since 1929.

Earnings in 1935 as usual will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Iroquois County for 1930-1934

Items	1930 1/	1931 1/	1932 2/	1933 2/	1934
Number of farms	38	41	37	34	31
Average size of farms, acres	243	242	234	231	255
Average rate earned, to pay for management, risk and capital	.2%	-1.2%	-1.7%	3.0%	4.65%
Average labor and management wage	$-1 723	$-2 172	$-2 144	$-208	$ 386
Gross income per acre	12.27	7.93	5.67	13.21	14.86
Operating cost per acre	11.83	10.19	8.59	8.49	7.98
Average value of land per acre	147	134	126	117	108
Total investment per acre	208	184	169	158	148
Investment per farm in:					
Total livestock	3 274	2 422	1 822	1 740	1 881
Cattle	1 560	974	716	810	736
Hogs	526	445	221	188	223
Poultry	179	160	133	123	91
Gross income per farm	2 986	1 915	1 327	3 048	3 787
Income per farm from:					
Crops	898	568	284	1 822	1 595
Miscellaneous income	53	36	25	32	2
Total livestock	2 035	1 311	1 018	1 194	2 079
Cattle	301	12	138	112	550
Dairy sales	526	590	362	368	484
Hogs	849	434	286	474	664
Poultry	331	230	180	189	105
Average yield of corn in bu.	33	41	49	29	23
Average yield of oats in bu.	32	39	43	18	15

1/ Record from Kankakee County included 1930 and 1931.
2/ Record from Kankakee and Vermilion Counties included for 1932 and 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-EIGHT FARMS IN CHAMPAIGN COUNTY, ILLINOIS, 1934

P. E. Johnston, R. C. Ross, and T. R. Hedges*

The farm earnings of 38 account-keeping farmers in Champaign County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 38 accounts show for 1934 an average net income of $2,660 per farm, as compared with an average of $1,826 in 1933, and an average net loss of $519 in 1932. The average cash income in 1934 was $4,401 per farm, the cash business expenditures $1,678 per farm, leaving a cash balance of $2,723 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $557 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,280 per farm. The inventory increase was a much smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth, and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*J. E. Harris, farm adviser in Champaign County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that, in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 38 accounting farms the most successful third shows an average net income of $4,825, while the average net income of the least successful third of the farms was only $791. In 1933 the comparable net incomes for the two groups was $3,280 and $483 respectively. Figured on a cash basis the most successful farms had on an average $2,721 more cash income left to meet interest payments and family living than did the less successful farms.

Investments, Receipts, Expenses and Earnings on
38 Champaign County Farms in 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		30 298	35 743	25 293
Farm improvements		3 490	3 593	2 666
Livestock total		1 272	1 267	1 128
Horses		408	430	470
Cattle		563	556	413
Hogs		205	178	146
Sheep		18	19	21
Poultry		78	84	78
Machinery and equipment		1 445	1 766	1 243
Feed and grains		2 243	3 063	1 507
Total capital investment	$	$38 748	$45 432	$31 837
RECEIPTS AND NET INCREASES				
Livestock total		1 491	1 643	1 089
Horses		8	4	7
Cattle		297	367	170
Hogs (including AAA payments)		677	767	408
Sheep		48	96	33
Poultry		68	67	74
Egg sales		88	68	82
Dairy sales		305	274	315
Feed and grains (including AAA payments)		2 855	4 928	1 220
Labor off farm		89	175	45
Miscellaneous receipts		8	23	---
Total receipts & net increases	$	$ 4 443	$ 6 769	$ 2 354
EXPENSES AND NET DECREASES				
Farm improvements		181	148	157
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		336	376	267
Feed and grains		---	---	---
Livestock expense		21	16	22
Crop expense		136	178	117
Hired labor		171	242	95
Taxes		290	334	259
Miscellaneous expenses		28	26	26
Total expenses & net decreases	$	$ 1 163	$ 1 320	$ 945
RECEIPTS LESS EXPENSES	$	$ 3 280	$ 5 449	$ 1 411
Total unpaid labor		620	624	620
Operator's labor		522	528	540
Family labor		98	96	80
Net income from investment and management		2 660	4 825	791
RATE EARNED ON INVESTMENT	%	6.86%	10.62%	2.48%
Return to capital and operator's labor and management		3 182	5 353	1 331
5% of capital invested		1 937	2 271	1 592
LABOR AND MANAGEMENT WAGE	$	$ 1 245	$ 3 082	$ -261

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19 and over.	4	$7.	5
17	4	5.	4
15	1	3.	0
13	4	1.	3
11	8	-1.	1
9	3	-3.	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 273.3 acres each, the least successful 204.5 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of grains accounts for much of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	3 688	1 933
Average of 13 most successful farms.	5 439	2 868
Average of 13 least successful farms	2 116	791
Your farm.		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. This is an important factor in accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms in Champaign County was $557 in 1934, as compared with $1,089 in 1933, and an inventory loss of $847 a farm in 1932. There were increases of $143 in total livestock, $411 in feed and grain, and $82 in machinery, while improvements showed a decrease of $79. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 272	$1 415	$ 143	$
Feed and grains	2 243	2 654	411	
Machinery	1 445	1 527	82	
Improvements (except residence)	3 490	3 411	-79	
Total	$8 450	$9 007	$ 557	$

Some Adjustments on Champaign County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1934 farm operating costs declined each year. Total operating expenses were 57 cents an acre lower in 1934 than in 1933, while cash operating expenses were $1,678 a farm in 1934 as compared with $1,492 in 1933. The largest increase in expenditures over the previous year was for machinery and supplies for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Champaign County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 245	$ 582	$	$1 593	$2 611
Feed and grains		141	149		2 585	3 587
Machinery		540	775		122	137
Improvements		106	298		4	--
Labor		171	471		89	86
Miscellaneous		28	32		8	6
Livestock expense		21	39		--	--
Crop expense		136	243		--	--
Taxes		290	483		--	--
Total	$	$1 678	$3 072	$	$4 401	$6 430
Excess of cash sales over expenses				$	$2 723	$3 358
Increase in inventory					557	1 027
Income to labor and capital (Receipts less expenses)					3 280	4 385

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 68 percent of that in 1929, cash expenditures were only 55 percent as large. In 1934 livestock purchases were 42 percent, and feed and grain purchases 95 percent as large as in 1929. In 1934 these farms paid out 70 percent as much for machinery, and 56 percent as much for crop expense as in 1929, while taxes were reduced to 60 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The reasons for the difference in earnings between the most profitable group and the least profitable group included in this study may be obtained from a study of the data on pages 3 and 8.

The most successful farms had an average total investment of $45,432, as compared with a total of $31,837 for the least successful farms. The most successful farms secured average total receipts of $6,769, while the comparable figure for the least successful was $2,354. The net receipts, on a per acre basis, were $17.66 for the most profitable group, as compared with $3.87 for the least profitable group.

The most profitable farms averaged 68.8 acres larger, had 34.2 acres more corn, 11.8 acres more oats, and 16.2 acres more soybeans than the least profitable farms. They also carried larger inventories on which to make a profit when prices advanced. One reason for the larger inventories was the higher crop yields, the most profitable farms having an advantage of 16.9 bushels of corn, 14.1 bushels of oats, and 7.1 bushels of soybeans per acre. Crop yields were so low on the least profitable farms that there was an average inventory loss of $168 per farm in spite of the price advances.

Although there was about the same amount of livestock per acre on the farms in the two groups, there was a difference in income of 71 cents per acre in favor of the most profitable farms. The returns for each $100 of feed fed to livestock was $146, as compared with $128. The income per litter farrowed was $97 on the most profitable farms, as compared with $66 on the least profitable farms.

The most profitable farms secured their larger income with a total operating cost of $7.11 per acre, as compared with $7.64 per acre on the least profitable farms. On the most successful farms man labor costs were 58 cents per crop acre lower, and power and machinery costs were 23 cents per crop acre lower than on the least successful farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	12	$164	4	$170	11	$98	$286
1/3 least profitable farms	12	97	2	138	10	82	174
All accounting farms	35	131	8	170	32	94	226

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 78 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 21.7 contracted acres which were used as follows: 4.3 idle; 3.5 red clover; 4.1 sweet clover; 4.3 soybeans; 1.2 alfalfa; and 4.3 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as most of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops, as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
38 Champaign County Farms in 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		231.9	273.3	204.5
Percent of land area tillable		95.5	96.7	93.8
Percent of tillable land in hay and pasture		25.6	21.1	28.2
Gross receipts per acre		19.16	24.77	11.5
Total expenses per acre		7.69	7.11	7.6
Net receipts per acre		11.47	17.66	3.8
Value of land per acre		131	131	124
Total investment per acre		167	166	156
Acres in Corn		74.3	92.1	57.9
Oats		41.6	51.9	40.1
Wheat		11.3	17.7	9.1
Soybeans		33.4	44.3	28.1
Hay		18	14.6	21.1
Tillable pasture		38.7	41.1	33
Crop yields--Corn, bu. per acre		35.3	32.2	15.3
Oats, bu. per acre		12.9	19.3	5.2
Wheat, bu. per acre		20.6	20.3	20
Soybeans, bu. per acre		25.8	29	21.9
Value of feed fed to productive L.S.		1 154	1 125	846
Returns per $100 of feed fed to productive livestock		128	146	128
Returns per $100 invested in:				
Cattle		103	106	107
Poultry		191	157	195
Pigs weaned per litter		5.7	6.1	5.3
Income per litter farrowed		91	97	66
Dairy sales per dairy cow		49	51	46
Investment in productive L.S. per A.		4.04	3.57	3.83
Receipts from productive L.S. per A.		6.39	6.00	5.29
Man labor cost per crop acre		4.13	3.64	4.22
Machinery cost per crop acre		1.84	1.69	1.68
Power and mach. cost per crop A.		2.86	2.71	2.94
Farms with tractor		79%	84.6%	61.5%
Value of feed fed to horses		194	232	207
Man labor cost per $100 gross income		17	12	28
Expenses per $100 gross income		40	29	66
Farm improvements cost per acre		.78	.54	.77
Excess of sales over cash expenses		2 723	4 300	1 579
Increase in inventory		557	1 149	-163
Rate earned on investment		6.86	10.62	2.48
Gross receipts per farm		4 443	6 769	2 354

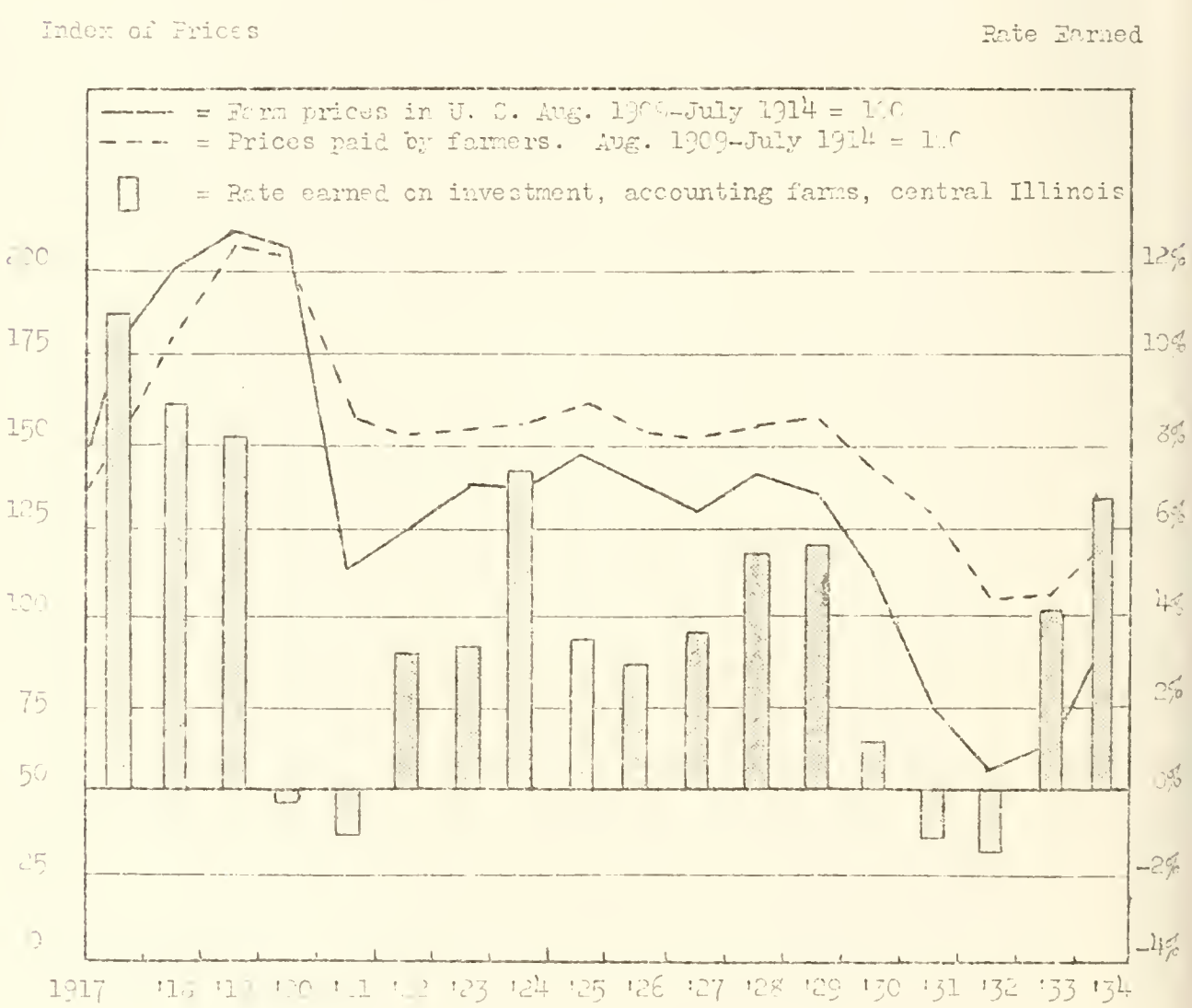
Chart for Studying the Efficiency of Various Parts of Your Business, Champaign County, 1934

The numbers above the lines across the middle of the page are the averages for the 38 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
6.86	50	43	36	141	89	440	228	--	.36	--	3557	7700	34	10900	430
4.86	45	37	34	131	81	390	208	.13	.86	--	2957	6700	31	9400	390
2.86	40	31	32	121	73	340	188	1.13	1.36	--	2357	5700	28	7900	350
0.86	35	25	30	111	65	290	168	2.13	1.86	--	1757	4700	25	6400	310
8.86	30	19	28	101	57	240	148	3.13	2.36	7	1157	3700	22	4900	270
6.86	25.3	12.9	25.8	91	49	191	128	4.13	2.86	17	557	2723	19.16	4443	232
4.86	20	7	24	81	41	140	108	5.13	3.36	27	-43	1700	16	2900	190
2.86	15	1	22	71	33	90	88	6.13	3.86	37	-643	700	13	1400	150
.86	10	--	20	61	25	40	68	7.13	4.36	47	-1243	-300	10	-100	110
1.14	5	--	18	51	17	--	48	8.13	4.86	57	-1843	-1300	7	-1600	70
3.14	--	--	16	41	9	--	28	9.13	5.36	67	-2443	-2300	4	-2600	30

Influence of Price Changes on Farm Earnings

Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



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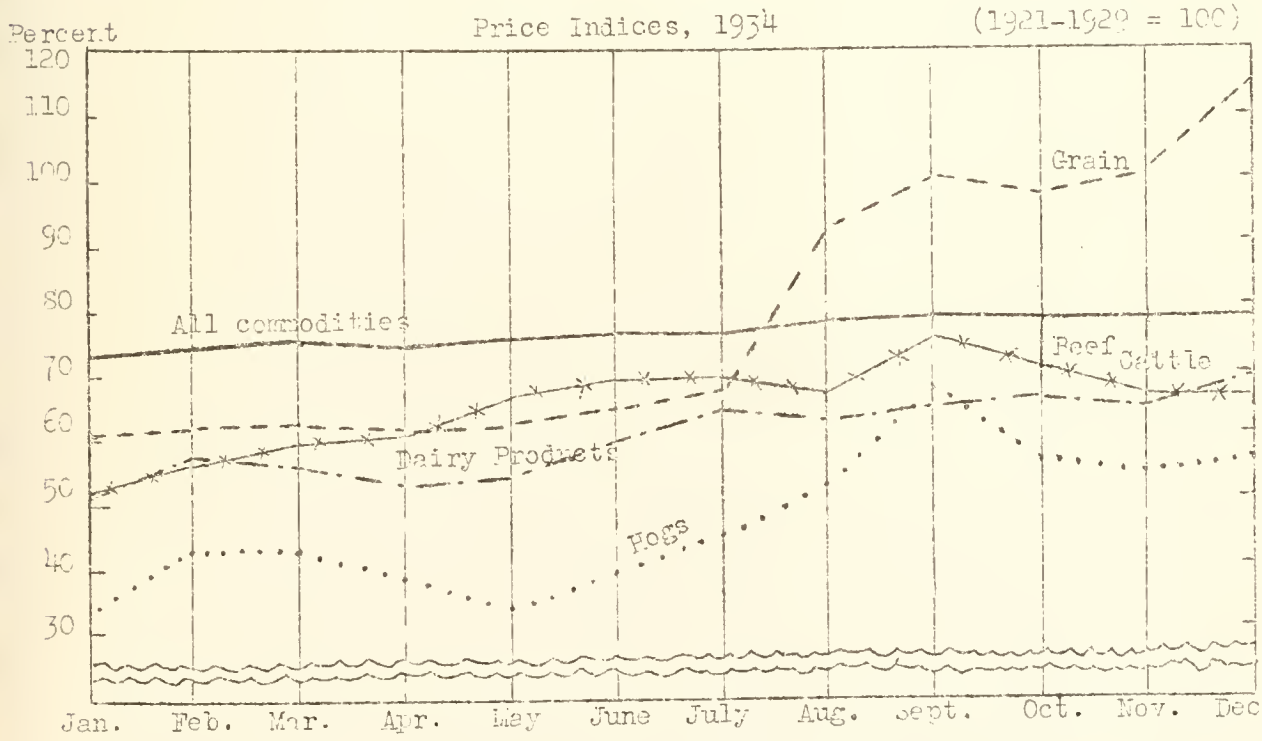
The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Champaign County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 70 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five. Thus profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Champaign County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	38	34	31	43	38
Average size of farms, acres	239	233	227	231	232
Average rate earned, to pay for management, risk and capital	1.4%	-1.0%	-1.3%	4.7%	6.86%
Average labor and management wage	$-1 344	$-2 399	$-2 024	$391	$1 245
Gross income per acre	15.26	7.47	6.54	16.17	19.16
Operating cost per acre	12.05	9.63	8.83	8.26	7.69
Average value of land per acre	181	170	143	135	131
Total investment per acre	235	213	178	168	167
Investment per farm in:					
Total livestock	2 238	1 735	1 437	1 348	1 272
Cattle	1 003	633	573	566	563
Hogs	356	346	277	212	205
Poultry	140	104	84	84	78
Gross income per farm	3 645	1 737	1 482	3 734	4 443
Income per farm from:					
Crops	2 126	918	697	2 671	2 855
Miscellaneous income	62	49	36	59	8
Total livestock	1 457	770	749	1 004	1 491
Cattle	244	24	138	190	297
Dairy sales	353	246	184	232	305
Hogs	662	342	322	424	677
Poultry	163	150	90	112	68
Average yield of corn in bu.	35	46	59	33	25
Average yield of oats in bu.	36	46	51	22	13
Average yield of soybeans in bu.	21	28	29	20	26

ANNUAL FARM BUSINESS REPORT ON THIRTY-TWO FARMS IN DEWITT, PIATT, AND LOGAN COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. E. Wills, and A. L. Leonard*

The farm earnings of 32 account-keeping farmers in DeWitt, Piatt, and Logan Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 32 accounts show for 1934 an average net income of $3,534 per farm, as compared with an average of $1,647 in 1933, and an average net loss of $609 in 1932. The average cash income in 1934 was $5,256 per farm, the cash business expenditures $2,360 per farm, leaving a cash balance of $2,896 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income there was an inventory increase of $1,318 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $4,214 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* H. N. Meyers, S. S. Davis, and N. H. Anderson, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand, the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 32 accounting farms the most successful third shows an average net income of $4,447, while the average net income of the least successful third of the farms was only $1,872. In 1933 the comparable net incomes for the two groups was $3,294, and $200 respectively.

Investments, Receipts, Expenses and Earnings on 32
DeWitt, Piatt, and Logan County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
CAPITAL INVESTMENTS				
Land		32 860	28 534	31 463
Farm improvements		4 323	4 007	3 664
Livestock total		1 743	1 484	1 684
Horses		629	529	609
Cattle		718	584	631
Hogs		282	254	313
Sheep		48	37	80
Poultry		66	80	51
Machinery and equipment		1 567	1 518	1 495
Feed and grains		2 540	2 352	1 790
Total capital investment	$	$43 033	$38 195	$40 096
RECEIPTS AND NET INCREASES				
Livestock total		1 899	1 487	1 844
Horses		61	3	74
Cattle		640	330	431
Hogs (including AAA payments)		747	678	906
Sheep		65	49	111
Poultry		68	80	65
Egg sales		83	112	55
Dairy sales		235	235	202
Feed and grains (including AAA payments)		3 828	4 938	2 260
Labor off farm		86	108	49
Miscellaneous receipts		4	13	---
Total receipts & net increases	$	$ 5 817	$ 6 546	$ 4 153
EXPENSES AND NET DECREASES				
Farm improvements		238	201	284
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		437	448	464
Feed and grains		---	---	---
Livestock expense		50	37	58
Crop expense		200	190	142
Hired labor		277	302	258
Taxes		360	372	322
Miscellaneous expenses		41	29	65
Total expenses & net decreases	$	$ 1 603	$ 1 579	$ 1 593
RECEIPTS LESS EXPENSES	$	$ 4 214	$ 4 967	$ 2 560
Total unpaid labor		680	520	688
Operator's labor		511	455	540
Family labor		169	65	148
Net income from investment and management		3 534	4 447	1 872
RATE EARNED ON INVESTMENT	%	8.21%	11.64%	4.67%
Return to capital and operator's labor and management		4 045	4 902	2 412
% of capital invested		2 152	1 920	2 005
LABOR AND MANAGEMENT WAGE	$	$ 1 893	$ 2 992	$ 407

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$23	1	$9	4
21	2	7	7
19	0	5	1
17	3	3	0
15	7	1	0
13	2	-1	1
11	4		

A further study of the farm businesses, made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms averaged 281 acres each, the least profitable 256 acres. The most profitable farms carried larger inventories of feed and grains, and hence had a larger investment in this account than the least profitable farms. The most profitable farms had higher total receipts and net increases, due mostly to larger sales of feed and grains. The total farm expense, including the charge for family labor, was lower on the most profitable farms than on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	4 158	2 399
Average of 11 most successful farms	4 324	3 327
Average of 11 least successful farms	2 666	1 566
Your farm		

The most profitable farms had a larger inventory of corn both at the beginning and end of the year. This difference was an important factor in accounting for their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in this area was $1,318 in 1934, as compared with $695 in 1933, and an inventory loss of $1,021 a farm in 1932. There were increases of $257 in total livestock, $1.114 in feed and grain, and $35 in machinery, while improvements showed a decrease of $88. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 743	$2 000	$ 257	$
Feed and grains	2 540	3 654	1 114	
Machinery	1 567	1 602	35	
Improvements (except residence)	4 323	4 235	-88	
Total	$10 173	$11 491	$1 318	$

Some Adjustments on DeWitt, Piatt, and Logan County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 40 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,360 a farm in 1934, as compared with $1,545 in 1933. The largest increase in expenditures over the previous year was for machinery and repairs for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in DeWitt, Piatt, and Logan Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 456	$ 756	$	$2 098	$3 334
Feed and grains		187	509		2 901	3 542
Machinery		620	917		148	146
Improvements		169	346		19	---
Labor		277	498		36	36
Miscellaneous		41	36		4	14
Livestock expense		50	40		---	---
Crop expense		200	273		---	---
Taxes		360	445		---	---
Total	$	$2 360	$3 820	$	$5 256	$7 072
Excess of cash sales over expenses				$	$2 896	$3 252
Increas in inventory					1 318	530
Income to labor and capital (Receipts less expenses)					4 214	3 782

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 74 percent of that in 1929, cash expenditures were only 62 percent as large. In 1934, livestock purchases were 60 percent, and feed and grain purchases 37 percent as large as in 1929. In 1934 these farms paid out 68 percent as much for machinery, and 73 percent as much for crop expense as in 1929, while taxes were reduced to 81 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $15.85, as compared with $7.33 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were larger, having 26.3 more crop acres than the least profitable farms. They had 14.2 acres more corn and 19.7 acres more soybeans, the latter being one of the high yielding crops in 1934. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. One reason for the larger inventories, in addition to the larger acreage, was the higher crop yields, there being an advantage of 7.6 bushels of corn, 6 bushels of oats, 3.6 bushels of wheat and 3.2 bushels of soybeans per acre in favor of the high profit group.

The most profitable farms were not as intensive in their livestock production, but were more efficient in their livestock feeding operations than the least profitable farms. The most profitable farms had an investment in productive livestock of $3.80 per acre, and fed $1,061 of feed per farm, as compared with $4.63 invested per acre, and $1,695 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $140 for each $100 of feed fed, as compared with returns of $104 for each $100 of feed fed on the least profitable farms. The most profitable farms had an income of $38 per litter farrowed, as compared with an income of $67 per litter farrowed on the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $7.48 per acre, as compared with $8.92 per acre on the least profitable farms. Man labor costs per crop acre were $3.63 on the most profitable farms, as compared with $4.78 for the least profitable farms. Power and machinery costs per crop acre amounted to $3.37 on the most profitable farms, and $3.57 on the least profitable farms.

The Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	11	$161	5	$143	10	$136	$349
1/3 least profitable farms	11	138	3	260	11	148	357
All accounting farms	32	164	12	163	32	125	350

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 97 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 29.3 contracted acres which were used as follows: 3.9 idle; 6.0 red clover; 1.7 sweet clover; 8.8 soybeans; 2.0 alfalfa; and 6.9 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 32 DeWitt, Piatt, and Logan County Farms in 1954

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
Size of farms--acres		296.9	280.6	255.5
Percent of land area tillable		94.7	92.5	94.1
Percent of tillable land in hay and pasture		30.0	26.5	52.9
Gross receipts per acre		19.59	23.33	16.25
Total expenses per acre		7.69	7.48	8.92
Net receipts per acre		11.90	15.85	7.33
Value of land per acre		111	102	123
Total investment per acre		145	136	157
Acres in Corn		86.6	86.2	72.0
Oats		37.9	27.4	37.1
Wheat		24.6	22.0	21.0
Soybeans		40.5	45.8	26.1
Hay		25.0	23.3	24.5
Tillable pasture		59.2	45.5	52.3
Crop yields--Corn, bu. per acre		33.1	36.6	29.0
Oats, bu. per acre		14.2	18.8	12.8
Wheat, bu. per acre		23.1	23.1	19.5
Soybeans, bu. per acre		25.8	26.9	23.7
Value of feed fed to productive L.S.		1 513	1 061	1 695
Returns per $100 of feed fed to productive livestock		121	140	104
Returns per $100 invested in:				
Cattle		110	87	92
Poultry		222	223	231
Pigs weaned per litter		5.4	5.5	7.0
Income per litter farrowed		74	88	67
Dairy sales per dairy cow		38	30	39
Investment in productive L.S. per A.		4.10	3.80	4.63
Receipts from productive L.S. per A.		6.19	5.29	6.93
Man labor cost per crop acre		4.05	3.63	4.78
Machinery cost per crop acre		1.97	2.09	2.47
Power and mach. cost per crop A.		3.13	3.37	3.57
Farms with tractor		78%	73%	73%
Value of feed fed to horses		318	277	281
Man labor cost per $100 gross income		15	12	22
Expenses per $100 gross income		39	32	55
Farm improvements cost per acre		.80	.72	1.11
Excess of sales over cash expenses		2 896	3 276	1 710
Increase in inventory		1 318	1 691	850
Rate earned on investment		3.21%	11.64%	4.67%
Gross receipts per farm		5 817	6 546	4 153

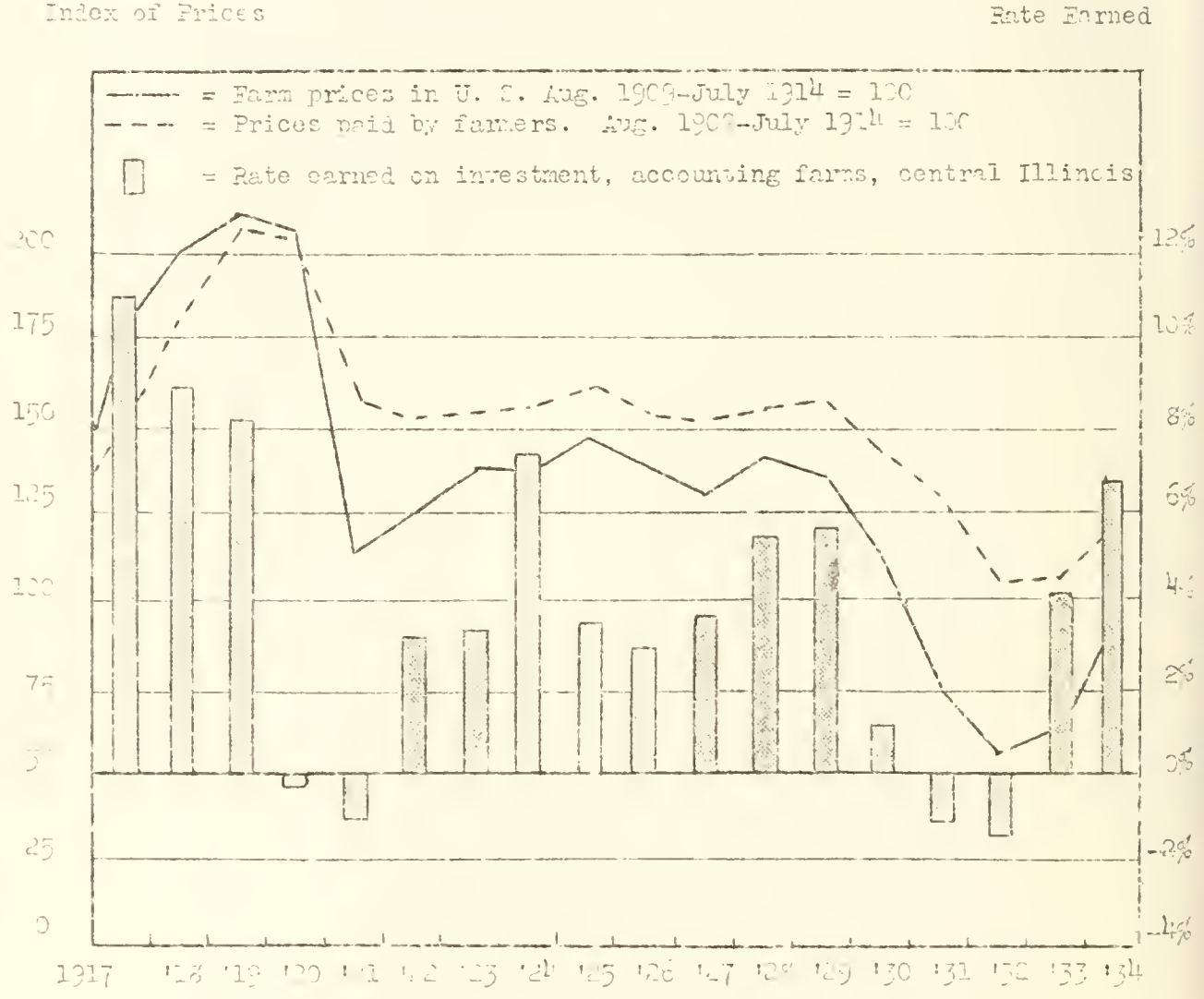
Chart for Studying the Efficiency of Various Parts of Four Business
DeWitt, Piatt, and Logan Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 32 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
13.7	53	34	41	149	73	522	321	--	--	--	6300	6900	40	10800	547
12.6	49	30	38	134	66	462	281	.05	--	3	5300	6100	36	9800	497
11.5	45	26	35	119	59	402	241	1.05	.13	6	4300	5300	32	8800	447
10.4	41	22	32	104	52	342	201	2.05	1.13	9	3300	4500	28	7800	397
9.3	37	18	29	89	45	282	161	3.05	2.13	12	2300	3700	24	6800	347
8.21	33.1	14.2	25.8	74	38	222	121	4.05	3.13	15	1318	2896	19.59	5817	297
7.1	29	10	23	59	31	162	81	5.05	4.13	18	300	2100	16	4800	247
6.0	25	6	20	44	24	102	41	6.05	5.13	21	-700	1300	12	3800	197
4.9	21	2	17	29	17	42	1	7.05	6.13	24	-1700	500	8	2800	147
3.8	17	--	14	14	10	-18	--	8.05	7.13	27	-2700	--	4	1800	97
2.7	13	--	11	--	3	-78	--	9.05	8.13	30	-3700	--	--	800	47

Influence of Price Changes on Farm Earnings

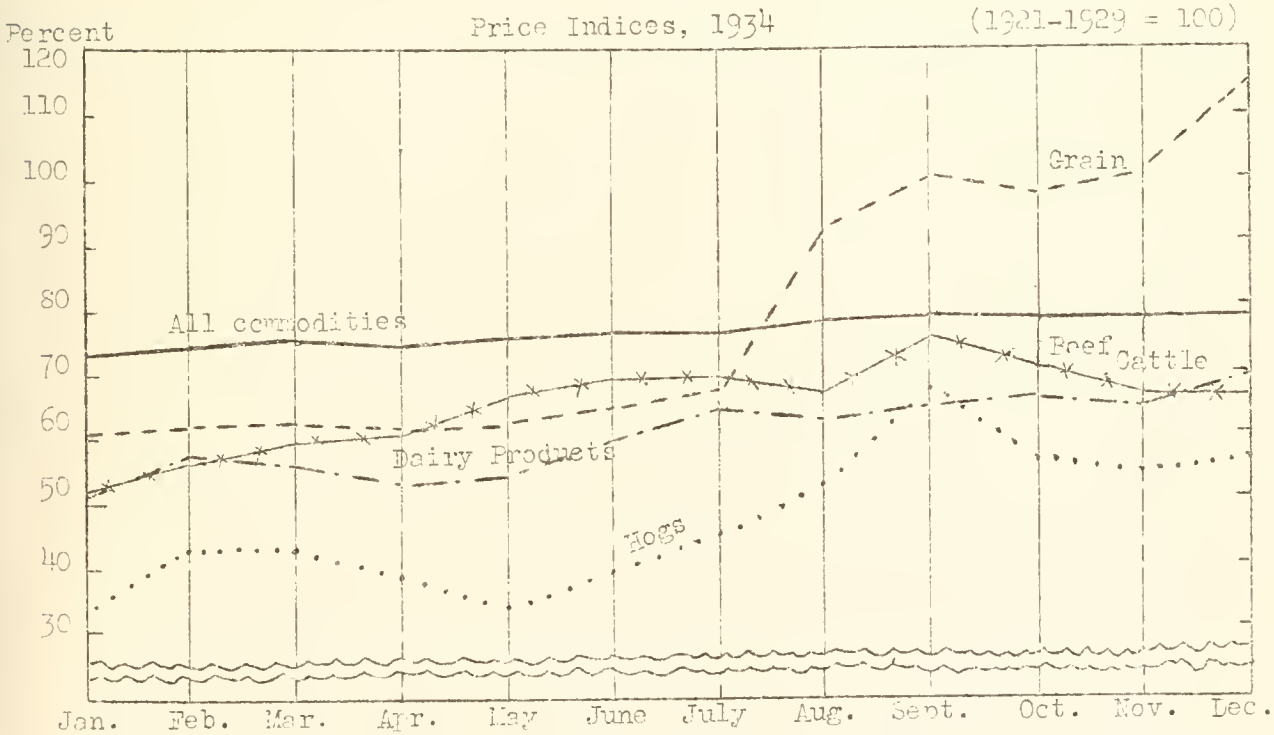
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



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Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in DeWitt, Piatt, and Logan Counties for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 99 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in DeWitt, Piatt, and Logan Counties for 1930-1934

Items	1930 1/	1931	1932 1/	1933	1934
Number of farms	56	48	53	37	32
Average size of farms, acres	248	270	251	277	297
Average rate earned, to pay for management, risk and capital	1.5%	-1.4%	-1.4%	4.1%	8.2%
Average labor and management wage	$-1 290	$-2 739	$-2 211	$165	$1 893
Gross income per acre	16.26	6.86	6.13	13.24	19.59
Operating cost per acre	12.92	9.63	8.56	7.29	7.69
Average value of land per acre	173	149	132	115	111
Total investment per acre	228	191	169	145	145
Investment per farm in:					
Total livestock	2 907	2 177	1 685	1 674	1 743
Cattle	1 421	843	813	792	718
Hogs	628	597	292	263	282
Poultry	131	113	103	81	66
Gross income per farm	4 040	1 851	1 539	3 665	5 817
Income per farm from:					
Crops	1 798	651	510	2 493	3 828
Miscellaneous income	72	40	52	35	4
Total livestock	2 170	1 160	977	1 137	1 899
Cattle	483	41	254	282	640
Dairy sales	354	295	284	216	235
Hogs	1 108	592	286	477	747
Poultry	220	124	141	125	68
Average yield of corn in bu.	40	47	56	26	53
Average yield of soybeans in bu.	24	25	25	17	26

1/ Records from Macon County included for 1930 and 1932.

ANNUAL FARM BUSINESS REPORT ON THIRTY FARMS IN KANKAKEE AND VERMILION COUNTIES, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and A. L. Leonard*

Farm earnings on the 30 accounting farms in Kankakee and Vermilion Counties averaged a return of 2.92 percent on the capital invested in the farm business in 1934. This is the second highest return during the past five years. The average return of 3.0 percent on the investment for 1933 was the highest. The 1934 return is remarkable, considering the severe drouth and chinch bug damage.

These 30 accounts show for 1934 an average net income of $940 per farm, as compared with an average of $1,089 in 1933, and an average net loss of $684 in 1932. The average cash income in 1934 was $3,427 per farm, the cash business expenditures $2,031 per farm, leaving a cash balance of $1,396 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $374 a farm due mostly to the rise in prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,770 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*G. T. Swaim and Otis Kercher, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans was much better compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 30 accounting farms the most successful third shows an average net income of $2,012, while the average net loss on the least successful third of the farms was $62. In 1933, the comparable net income for the most successful third and net loss for the least successful third was $2,428, and $-19 respectively.

Investments, Receipts, Expenses and Earnings on 30
Kankakee and Vermilion County Farms in 1934

Items	Your farm	Average of 30 farms	10 most profitable farms	10 least profitable farms
CAPITAL INVESTMENTS				
Land		23 208	20 756	24 020
Farm improvements		4 326	3 611	4 440
Livestock total		1 394	1 452	1 480
Horses		485	470	493
Cattle		631	717	656
Hogs		168	148	197
Sheep		16	30	11
Poultry		94	87	123
Machinery and equipment		1 433	1 480	1 314
Feed and grains		1 861	2 204	1 604
Total capital investment	$	$32 222	$29 503	$32 858
RECEIPTS AND NET INCREASES				
Livestock total		1 501	1 749	1 305
Horses		10	32	---
Cattle		308	350	268
Hogs (including AAA payments)		508	574	427
Sheep		34	91	13
Poultry		104	101	109
Egg sales		131	135	95
Dairy sales		406	466	393
Feed and grains (including AAA payments)		1 465	2 362	784
Labor off farm		80	94	26
Miscellaneous receipts		1	1	1
Total receipts & net increases	$	$ 3 047	$ 4 206	$ 2 116
EXPENSES AND NET DECREASES				
Farm improvements		213	204	252
Horses		---	---	33
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		387	465	322
Feed and grains		---	---	---
Livestock expense		36	39	37
Crop expense		193	215	210
Hired labor		159	158	189
Taxes		255	272	241
Miscellaneous expenses		34	38	30
Total expenses & net decreases	$	$ 1 277	$ 1 391	$ 1 314
RECEIPTS LESS EXPENSES	$	$ 1 770	$ 2 815	$ 802
Total unpaid labor		830	803	864
Operator's labor		538	536	540
Family labor		292	267	324
Net income from investment and management		940	2 012	- 62
RATE EARNED ON INVESTMENT	%	2.92%	6.82%	-.19%
Return to capital and operator's labor and management		1 478	2 548	478
5% of capital invested		1 611	1 475	1 643
LABOR AND MANAGEMENT WAGE	$	$ -133	$ 1 073	$-1 165

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$13	2	$3	7
11	0	1	2
9	4	-1	3
7	2	-3	3
5	6	-5	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net income, with those having the lowest income will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

Although the farms were of uniform size, the most profitable farms had a smaller total capital investment than either the least profitable farms, or the average of all farms. In spite of the smaller total investment, the most profitable farms had higher total receipts and net increases than the least profitable farms. A major part of the difference in income was due to the larger income from feed and grain, and livestock and livestock products on the most profitable farms. The total expense per farm and per acre, including the charge for family labor, was slightly higher on the most profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 747	1 301
Average of 10 most successful farms	3 364	2 106
Average of 10 least successful farms	2 392	780
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and at the end of the year. This difference accounted for a considerable part of their higher receipts and net increases from feed and grains.

The average inventory increase for the accounting farms in Kankakee and Vermilion Counties was $374 in 1934, as compared with $617 in 1933, and an inventory loss of $940 a farm in 1932. There were increases of $163 in total livestock, $217 in feed and grain, and $51 in machinery, while improvements showed a decrease of $57. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 394	$1 557	$163	$
Feed and grains	1 861	2 078	217	
Machinery	1 433	1 484	51	
Improvements (except residence)	4 326	4 269	-57	
Total	$9 014	$9 388	$374	$

Some Adjustments on Kankakee and Vermilion County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 52 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,031 a farm in 1934, as compared with $1,238 in 1933. The largest increases in expenditures over the previous year were for feed and grains, and machinery and supplies for machinery. Indications point to an even greater expansion of spending for machinery in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Kankakee and Vermilion Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 429	$ 451	$	$1 767	$2 941
Feed and grains		266	363		1 514	3 497
Machinery		501	1 075		63	142
Improvements		158	384		2	---
Labor		159	554		80	78
Miscellaneous		34	33		1	5
Livestock expense		36	47		---	---
Crop expense		193	292		---	---
Taxes		255	466		---	---
Total	$	$2 031	$3 665	$	$3 427	$6 663
Excess of cash sales over expenses				$	$1 396	$2 998
Increase in inventory					374	1 154
Income to labor and capital (Receipts less expenses)					1 770	4 152

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was only 51 percent of that in 1929, cash expenditures were 55 percent as large. In 1934 livestock purchases were 95 percent, and feed and grain purchases 73 percent as large as in 1929. In 1934 these farms paid out 47 percent as much for machinery, 41 percent as much for improvements, and 66 percent as much for crop expense as in 1929, while taxes were reduced to 55 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $8.55, as compared with a net loss of 26 cents per acre on the least profitable farms. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The two groups of farms were equal in size, but the most profitable group had a larger proportion of their land area tillable than the least profitable farms. The most profitable farms had 13.1 acres more corn, and 9.3 acres more wheat than the least profitable farms. The most profitable farms also carried larger inventories of feed and grain on which to make a profit when prices advanced. Along with the larger acreage of crops, another reason for the larger inventories of feed and grains was the higher yields, there being an advantage of 4.9 bushels of corn, 9.3 bushels of oats, and 5.4 bushels of wheat an acre in favor of the high-profit group. Crop yields were so low on the least profitable farms that there was an average inventory loss of $227 in the feed and grain account in spite of the price advances.

The total investment in productive livestock was $4.62 per acre on the most profitable farms, as compared with $4.05 per acre on the least profitable farms. The most profitable farms fed $1,167 worth of feed, securing a return of $147 for each $100 of feed fed, as compared with $1,282 worth of feed fed per farm, and a return of $102 for each $100 worth of feed fed on the low-profit group. The difference in livestock efficiency is further illustrated by the fact that the most profitable farms had a return of $97 per litter farrowed, as compared with a return of $63 per litter farrowed on the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of only 6 cents per acre above that on the least profitable farms. The man labor cost per crop acre was $4.70 on the most profitable farms, as compared with $5.57 on the least profitable farms, while power and machinery cost per crop acre was $3.86 on the most profitable farms, and $3.18 per crop acre on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	9	$117	3	$150	9	$ 96	$237
1/3 least profitable farms	8	100	3	125	7	100	188
All accounting farms	25	130	12	140	23	98	239

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were sufficient to pay 94 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 21.6 contracted acres which were used as follows: 6.4 idle; 0.8 red clover; 2.5 sweet clover; 5.3 soybeans; 1.4 alfalfa; and 5.2 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 30 Kankakee and Vermilion County Farms in 1934

Items	Your farm	Average of 30 farms	10 most profitable farms	10 least profitabl farms
Size of farms--acres		233.9	235.2	235.0
Percent of land area tillable		91.0	93.3	89.6
Percent of tillable land in hay and pasture		27.3	29.6	25.5
Gross receipts per acre		13.03	17.88	9.01
Total expenses per acre		9.01	9.33	9.27
Net receipts per acre		4.02	8.55	-.26
Value of land per acre		99	88	102
Total investment per acre		138	125	140
Acres in Corn		66.9	72.8	59.7
Oats		49.3	46.4	53.0
Wheat		12.4	16.9	7.6
Soybeans		8.1	5.9	11.7
Hay		29.1	30.7	27.7
Tillable pasture		29.2	34.2	26.1
Crop yields--Corn, bu. per acre		18.2	21.5	16.6
Oats, bu. per acre		13.8	19.6	10.3
Wheat, bu. per acre		5.9	9.1	3.7
Value of feed fed to productive L.S.		1 144	1 167	1 282
Returns per $100 of feed fed to productive livestock		130	147	102
Returns per $100 invested in:				
Cattle		111	117	108
Poultry		240	251	249
Pigs weaned per litter		5.9	6.3	5.9
Income per litter farrowed		81	97	63
Dairy sales per dairy cow		63	60	59
Investment in productive L.S. per A.		4.19	4.62	4.05
Receipts from productive L.S. per A.		6.37	7.30	5.55
Man labor cost per crop acre		5.15	4.70	5.57
Machinery cost per crop acre		2.11	2.51	1.74
Power and mach. cost per crop A.		3.45	3.86	3.18
Farms with tractor		66%	80%	60%
Value of feed fed to horses		257	281	232
Man labor cost per $100 gross income		31	21	49
Expenses per $100 gross income		69	52	103
Farm improvements cost per acre		.91	.87	1.07
Excess of sales over cash expenses		1 396	1 532	983
Increase in inventory		374	1 283	-181
Rate earned on investment		2.92	6.82	-.19
Gross receipts per farm		3 047	4 206	2 116

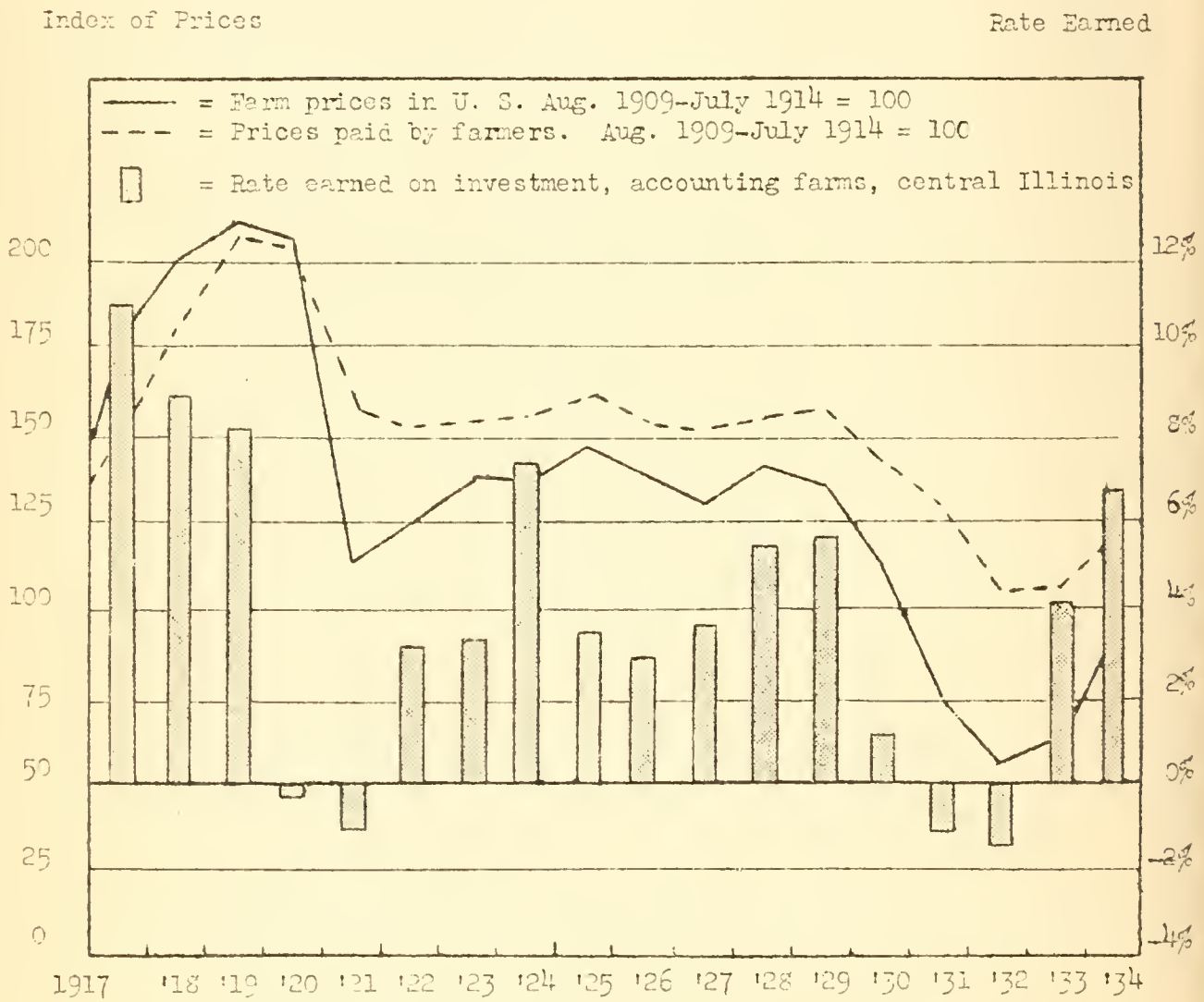
Chart for Studying the Efficiency of Various Parts of Your Business,
Kankakee and Vermilion Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 30 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
7.9	38	34	21	181	113	440	280	--	--	--	3374	3400	28	5000	534
6.9	34	38	18	161	103	400	250	.35	--	--	2774	3000	25	4600	474
5.9	30	32	15	141	93	360	220	1.55	.45	--	2174	2600	22	4200	414
4.9	26	26	12	121	83	320	190	2.75	1.45	1	1574	2200	19	3800	354
3.9	22	20	9	101	73	280	160	3.95	2.45	16	974	1800	16	3400	294
2.92	18.2	13.8	5.9	81	63	240	130	5.15	3.45	31	374	1396	13.03	3047	233.9
1.9	14	8	3	61	53	200	100	6.35	4.45	46	-226	1000	10	2600	174
.9	10	2	0	41	43	160	70	7.55	5.45	61	-826	600	7	2200	114
-.1	6	--	--	21	33	120	40	8.75	6.45	76	-1426	200	4	1800	54
-1.1	2	--	--	1	23	80	10	9.95	7.45	91	-2026	--	1	1400	--
-2.1	--	--	--	--	13	40	--	11.15	8.45	106	-2626	--	--	1000	--

Influence of Price Changes on Farm Earnings

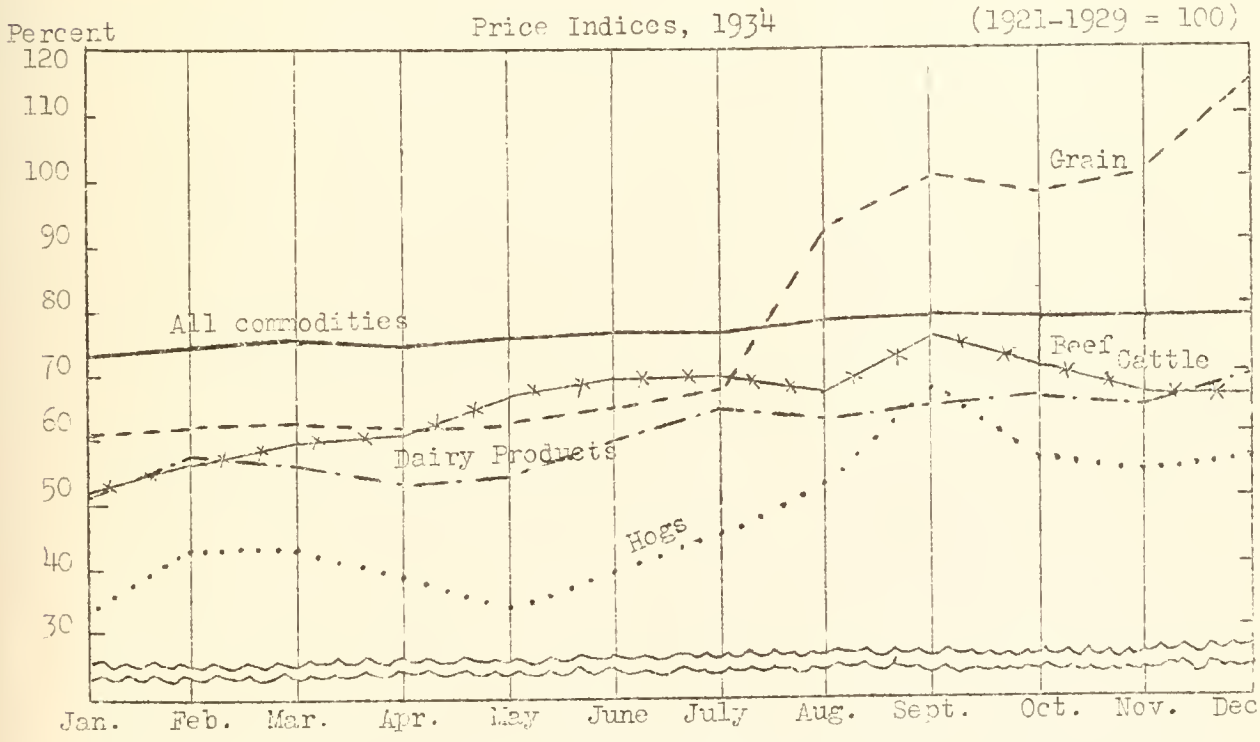
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Kankakee and Vermilion Counties for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure, and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Kankakee and Vermilion Counties for 1930-1934

Items	1930 1/	1931 1/	1932 2/	1933 2/	1934
Number of farms	38	41	37	34	30
Average size of farms, acres	243	242	234	231	234
Average rate earned, to pay for management, risk and capital	.2%	-1.2%	-1.7%	3.0%	2.9%
Average labor and management wage	$-1 723	$-2 172	$-2 144	$-208	$-133
Gross income per acre	12.27	7.93	5.67	13.21	13.03
Operating cost per acre	11.83	10.19	8.59	8.49	9.01
Average value of land per acre	147	134	126	117	99
Total investment per acre	208	184	169	158	138
Investment per farm in:					
Total livestock	3 274	2 422	1 822	1 740	1 394
Cattle	1 560	974	716	810	631
Hogs	526	445	221	188	168
Poultry	179	160	138	123	94
Gross income per farm	2 986	1 915	1 327	3 048	3 047
Income per farm from:					
Crops	898	568	284	1 822	1 465
Miscellaneous income	53	36	25	32	1
Total livestock	2 035	1 311	1 018	1 194	1 501
Cattle	301	12	138	112	308
Dairy sales	526	590	362	368	406
Hogs	849	434	286	474	508
Poultry	331	230	180	189	~~104~~ 235
Average yield of corn in bu.	33	41	49	29	18
Average yield of oats in bu.	32	39	43	18	14

1/ Records from Iroquois and Kankakee Counties included for 1930 and 1931.
2/ Records from Iroquois, Kankakee, and Vermilion Counties included for 1932 and 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-SIX FARMS IN CHRISTIAN COUNTY, ILLINOIS, 1934

P. E. Johnston, E. L. Sauer, and J. E. Wills*

The farm earnings of 36 account-keeping farmers in Christian County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 36 accounts show for 1934 an average net income of $2,748 per farm, as compared with an average of $1,446 in 1933, and an average of $162 in 1932. The average cash income in 1934 was $4,840 per farm, the cash business expenditures $2,076 per farm, leaving a cash balance of $2,764 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $688 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,452 per farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* T. H. Brock, farm adviser in Christian County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations, reported by a nationally known bank, showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 36 accounting farms the most successful third shows an average net income of $5,544, while the average net income of the least successful third of the farms was only $898. In 1933 the comparable net incomes for the two groups was $2,856 and $217, respectively.

Investments, Receipts, Expenses and Earnings on 36
Christian County Farms in 1934

Items	Your farm	Average of 36 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		24 896	33 352	21 390
Farm improvements		3 328	3 773	3 742
Livestock total		1 106	1 141	995
Horses		327	370	304
Cattle		394	337	360
Hogs		291	331	260
Sheep		31	40	1
Poultry		63	63	70
Machinery and equipment		1 644	2 324	1 444
Feed and grains		1 911	3 253	1 130
Total capital investment	$	$32 885	$43 843	$28 701
RECEIPTS AND NET INCREASES				
Livestock total		1 694	1 805	1 283
Horses		24	40	---
Cattle		237	250	132
Hogs (including AAA payments)		1 013	1 150	782
Sheep		43	72	---
Poultry		65	49	76
Egg sales		67	66	50
Dairy sales		240	178	243
Feed and grains (including AAA payments)		2 949	5 842	1 545
Labor off farm		88	134	64
Miscellaneous receipts		4	5	7
Total receipts & net increases	$	$ 4 735	$ 7 786	$ 2 399
EXPENSES AND NET DECREASES				
Farm improvements		137	156	138
Horses		---	---	11
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		414	552	427
Feed and grains		---	---	---
Livestock expense		24	23	23
Crop expense		168	148	161
Hired labor		216	290	181
Taxes		297	382	256
Miscellaneous expenses		27	34	23
Total expenses & net decreases	$	$ 1 283	$ 1 585	$ 1 220
RECEIPTS LESS EXPENSES	$	$ 3 452	$ 6 201	$ 1 679
Total unpaid labor		704	657	781
Operator's labor		524	502	529
Family labor		180	155	252
Net income from investment and management		2 743	5 544	898
RATE EARNED ON INVESTMENT	%	8.36%	12.64%	3.13%
Return to capital and operator's labor and management		3 272	6 046	1 427
5% of capital invested		1 644	2 192	1 435
LABOR AND MANAGEMENT WAGE	$	$ 1 628	$ 3 854	$ -8

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$25 and over	2	$11	5
23.	2	9	5
21.	3	7	4
19.	0	5	4
17.	1	3	4
15.	1	1	3
13.	2		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes, with those having the lowest net incomes should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 290.2 acres each, the least successful 214.9 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of grains accounts for much of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	2 559	1 016
Average of 12 most successful farms . .	4 325	1 749
Average of 12 least successful farms. .	1 577	670
Your farm		

The difference in quantities of grain inventoried was one of the important factors influencing the difference in earnings. The most profitable farms had a larger inventory of corn both at the beginning, and at the end of the year than did the least profitable farms.

The average inventory increase for the accounting farms in Christian County was $688 in 1934, as compared with $646 in 1933, and an inventory loss of $283 a farm in 1932. There were increases of $256 in total livestock, $433 in feed and grain, and $43 in machinery, while improvements showed a decrease of $44. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 106	$1 362	$256	$
Feed and grains	1 911	2 344	433	
Machinery	1 644	1 687	43	
Improvements (except residence)	3 328	3 284	-44	
Total	$7 989	$8 677	$688	$

Some Adjustments on Christian County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1929 through 1933, farm operating costs declined each year. However, the year 1934 brought a reversal of this trend. Total operating expenses were 75 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,076 a farm in 1934, as compared with $1,918 in 1933. The largest increase in expenditures over the previous year was for machinery and supplies for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Christian County 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 241	$ 975	$	$1 679	$3 627
Feed and grains		311	748		2 827	3 453
Machinery		699	1 154		242	267
Improvements		93	322		---	---
Labor		216	430		78	98
Miscellaneous		27	34		4	13
Livestock expense		24	57		---	---
Crop expense		168	351		---	---
Taxes		297	463		---	---
Total	$	$2 076	$4 584	$	$4 840	$7 452
Excess of cash sales over expenses				$	$2 764	$2 868
Increase in inventory					688	746
Income to labor and capital (Receipts less expenses)					3 452	3 614

The cumulative effect of several years of low agricultural prices in the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 65 percent of that in 1929, cash expenditures were only 45 percent as large. In 1934 livestock purchases were 25 percent, and feed and grain purchases 42 percent as large as in 1929. In 1934 these farms paid out 61 percent as much for machinery, and 48 percent as much for crop expense as in 1929, while taxes were reduced to only 64 percent of the 1929 level.

Comparison of Farms with High and Low Earnings

The most profitable farms in this study had net receipts per acre of $19.10, as compared with $4.18 for the least profitable farms. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

In Christian County the most profitable farms averaged 75.3 acres larger, had 14.6 acres more corn, and 82.5 acres more soybeans than the least profitable farms. They also carried larger inventories of both crops and livestock on which to make a profit when prices advanced. One reason for the larger inventories was the higher crop yields, the most profitable farms having an advantage of 10 bushels of corn, 7.2 bushels of wheat, and 7.3 bushels of soybeans per acre.

The most profitable farms had an investment in productive livestock of $3.20 per acre, and fed $1,348 of feed per farm, as compared with $3.67 invested per acre and $1,047 of feed fed per farm, on the least profitable farms. The productive livestock, on the most profitable farms, returned $131 for each $100 of feed fed, as compared with a return of $123 for $100 of feed fed on the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $7.73 per acre, as compared with $9.31 per acre on the least profitable farms. Man labor costs per crop acre were $3.45 on the most profitable farms, as compared with $5.65 on the least profitable farms, while power and machinery costs per crop acre amounted to $2.77 on the most profitable farms, and $3.76 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A larger percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	Average of all payments 1/
1/3 most profitable farms	11	$142	3	$127	11	$175	$322
1/3 least profitable farms	11	96	3	107	10	122	216
All accounting farms	34	104	9	125	33	144	262

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 88 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 20 contracted acres which were used as follows: 1.7 idle; 4.3 red clover; 2.7 sweet clover; 7.7 soybeans; .4 alfalfa; and 3.2 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as most of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 36
Christian County Farms in 1934

Items	Your farm	Average of 36 farms	12 most profitable farms	12 least profitabl farms
Size of farms--acres		237.0	290.2	214.9
Percent of land area tillable		93.2	94.6	91.9
Percent of tillable land in hay and pasture		23.7	17.3	27.4
Gross receipts per acre		19.98	26.83	13.49
Total expenses per acre		8.39	7.73	9.31
Net receipts per acre		11.59	19.10	4.18
Value of land per acre		105	115	100
Total investment per acre		139	151	134
Acres in Corn		59.0	67.7	53.1
Oats		15.0	17.4	18.3
Wheat		25.9	22.6	32.5
Soybeans		64.1	117.0	34.5
Hay		20.7	22.5	18.8
Tillable pasture		31.7	25.0	35.3
Crop yields--Corn, bu. per acre		21.5	27.5	17.5
Oats, bu. per acre		11.3	11.1	13.0
Wheat, bu. per acre		26.2	30.4	23.2
Soybeans, bu. per acre		26.2	28.3	21
Value of feed fed to productive L.S.		1 383	1 548	1 047
Returns per $100 of feed fed to productive livestock		126	131	123
Returns per $100 invested in:				
Cattle		106	100	89
Poultry		194	169	162
Pigs weaned per litter		6.1	6.1	6.2
Income per litter farrowed		90	87	93
Dairy sales per dairy cow		44	54	37
Investment in productive L.S. per A.		3.73	3.20	3.67
Receipts from productive L.S. per A.		7.05	6.08	5.97
Man labor cost per crop acre		4.58	3.45	5.65
Machinery cost per crop acre		2.19	2.21	2.63
Power and mach. cost per crop A.		2.99	2.77	3.76
Farms with tractor		77%	100%	75%
Value of feed fed to horses		175	179	172
Man labor cost per $100 gross income		18	11	32
Expenses per $100 gross income		42	29	69
Farm improvements cost per acre		.58	.54	.64
Excess of sales over cash expenses		2 764	4 398	1 143
Increase in inventory		688	1 293	536
Rate earned on investment		8.36%	12.64%	3.13%
Gross receipts per farm		4 735	7 786	2 899

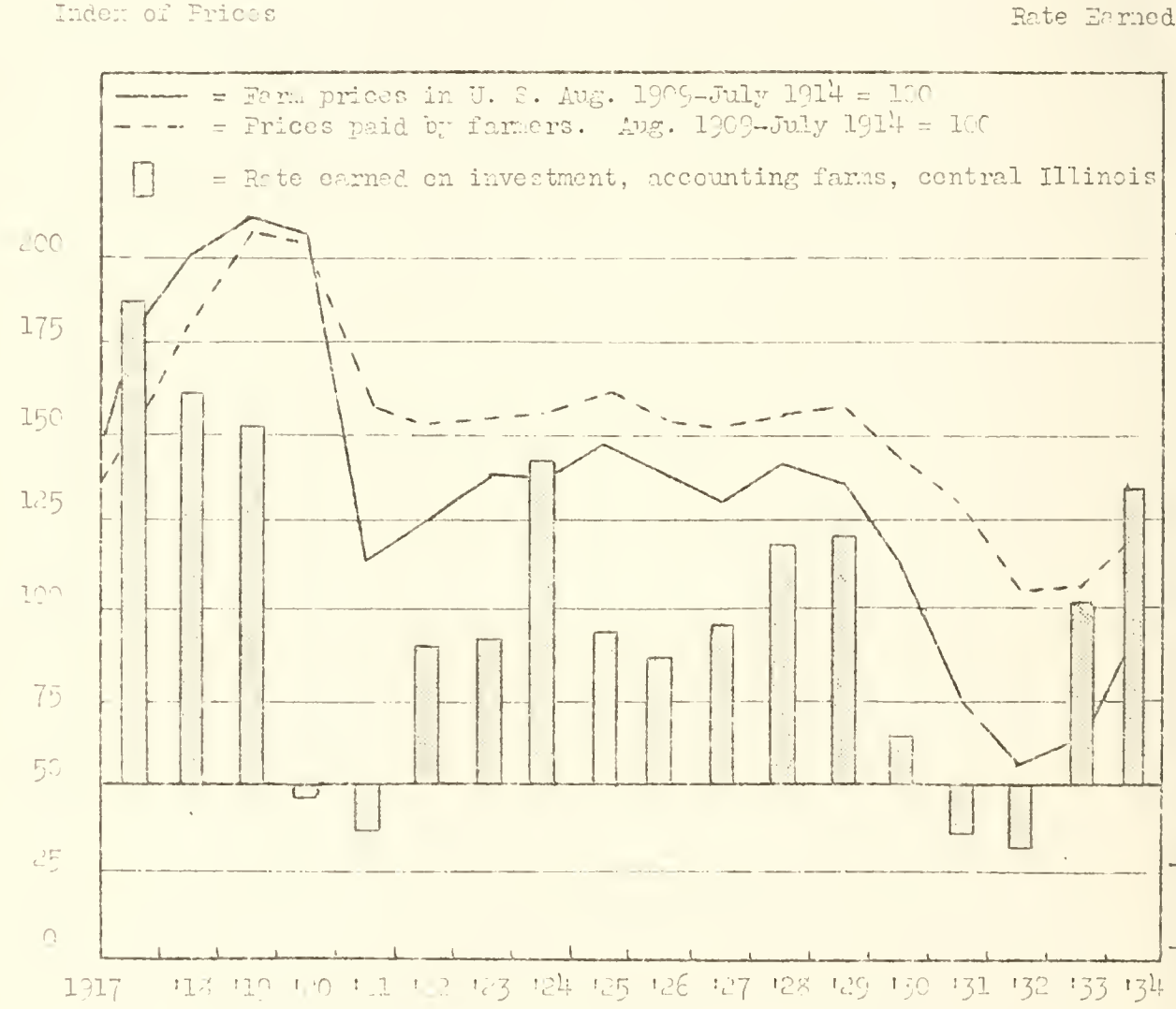
Chart for Studying the Efficiency of Various Parts of Your Business, Christian County 1934

The numbers above the lines across the middle of the page are the averages for the 36 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Wheat	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expense	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
18.4	42	36	36	140	69	344	226	--	--	--	3638	7764	45	14700	487
16.4	38	34	34	130	64	314	206	--	--	--	3038	6764	40	12700	437
14.4	34	32	32	120	59	284	186	.08	--	0	2488	5764	35	10700	387
12.4	30	30	30	110	54	254	166	1.58	1.00	6	1838	4764	30	8700	337
10.4	26	28	28	100	49	224	146	3.08	2.00	12	1238	3764	25	6700	287
8.36	21.5	26.2	26.2	90	44	194	126	4.58	2.99	18	638	2764	19.98	4735	237
6.4	18	24	24	80	39	164	106	6.08	4.00	24	38	1764	15	2700	187
4.4	14	22	22	70	34	134	86	7.58	5.00	30	-512	764	10	700	137
2.4	10	20	20	60	29	104	66	9.08	6.00	36	-1112	-236	5	--	87
.4	6	18	18	50	24	74	46	10.58	7.00	42	-1712	-1236	--	--	37
--	2	16	16	40	19	44	26	12.08	8.00	48	-2312	-2236	--	--	--

Influence of Price Changes on Farm Earnings

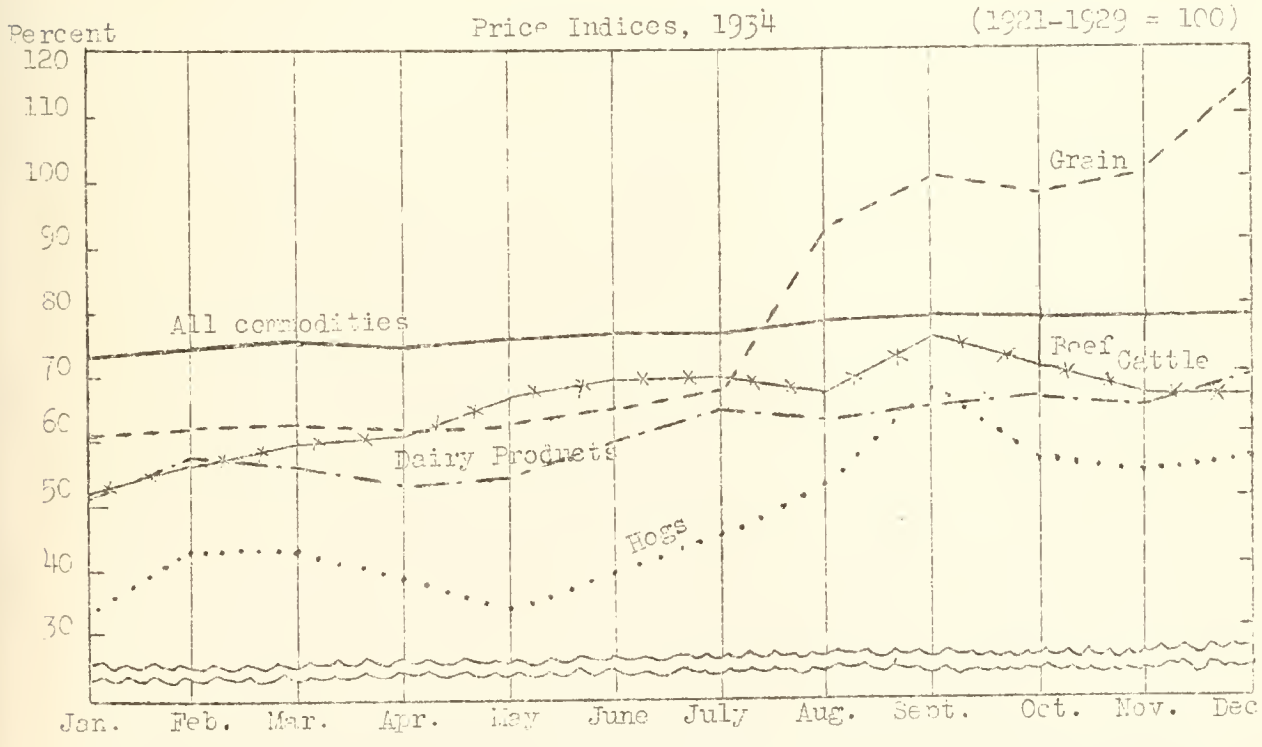
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditure on the accounting farms in Christian County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of low crop yields, yet total receipts per farm were higher than in any other year in the last five. Operating costs per acre continued to be relatively low. Thus profits were the best the county had experienced since 1928.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grains and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Christian County for 1930-1934

Items	1930 1/	1931	1932	1933	1934
Number of farms	34	29	30	30	36
Average size of farms, acres	252	260	272	250	237
Average rate earned, to pay for management, risk and capital	2.1%	-3.0%	.5%	4.4%	8.36%
Average labor and management wage	$-530	$-2 807	$-1 060	$313	$1 628
Gross income per acre	15.24	4.97	8.63	13.43	19.98
Operating cost per acre	11.65	9.90	8.03	7.64	8.39
Average value of land per acre	133	127	99	101	105
Total investment per acre	174	163	130	132	139
Investment per farm in:					
Total livestock	2 436	1 932	1 501	1 389	1 106
Cattle	1 143	781	627	555	394
Hogs	623	565	358	355	291
Poultry	128	85	85	79	63
Gross income per farm	3 844	1 291	2 346	3 355	4 735
Income per farm from:					
Crops	1 615	---	934	1 852	2 949
Miscellaneous income	83	94	85	56	4
Total livestock	2 146	1 197	1 327	1 447	1 694
Cattle	162	89	205	228	237
Dairy sales	358	243	311	205	240
Hogs	1 476	761	715	898	1 013
Poultry	147	98	83	98	65
Average yield of corn in bu.	32	28	59	30	22
Average yield of wheat in bu.	22	30	27	23	11
Average yield of soybeans in bu.	21	18	29	21	26

1/ Records from Moultrie County included for 1930.

ANNUAL FARM BUSINESS REPORT ON THIRTY-ONE FARMS IN SHELBY AND MOULTRIE COUNTIES, ILLINOIS, 1934

P. E. Johnston, A. L. Leonard, and E. L. Sauer*

The farm earnings of 31 account-keeping farmers in Shelby and Moultrie Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 31 accounts show for 1934 an average net income of $3,007 per farm, as compared with an average of $1,343 in 1933, and an average net loss of $445 in 1932. The average cash income in 1934 was $4,398 per farm, the cash business expenditures $2,332 per farm, leaving a cash balance of $2,066 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $1,686 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,752 per farm. The inventory increase was a much larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low, due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*W. S. Batson and J. L. Stormont, farm advisers in Shelby and Moultrie Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 31 accounting farms the most successful third shows an average net income of $4,452, while the average net income of the least successful third of the farms was only $2,187. In 1933 the comparable net incomes for the two groups was $2,390, and $486, respectively.

The average accounting farm in Shelby and Moultrie Counties had 64.5 acres of corn, 42.3 acres of soybeans and 20.0 acres of wheat. They had an average yield per acre of 30.4 bushels of corn, 27.1 bushels of soybeans and 22.1 bushels of wheat. A combination of the above crop production and high grain prices was one of the major factors in bringing about the exceptionally high returns on these farms. Much of the variation in earnings between the most profitable and the least profitable farms was due to the differences in acreage and yields of crops, particularly soybeans and wheat.

Investments, Receipts, Expenses and Earnings on 31
Shelby and Moultrie County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
CAPITAL INVESTMENTS				
Land		23 753	22 736	26 469
Farm improvements		3 293	3 557	3 467
Livestock total		1 554	1 647	1 944
Horses		375	373	478
Cattle		817	880	1 049
Hogs		218	214	275
Sheep		62	82	34
Poultry		82	98	108
Machinery and equipment		1 265	1 107	1 469
Feed and grains		1 922	2 373	1 875
Total capital investment	$	$31 787	$31 420	$35 224
RECEIPTS AND NET INCREASES				
Livestock total		1 888	2 088	1 904
Horses		29	40	18
Cattle		301	453	285
Hogs (including AAA payments)		804	871	746
Sheep		76	42	66
Poultry		72	106	65
Egg sales		127	203	127
Dairy sales		479	373	597
Feed and grains (including AAA payments)		3 086	4 324	2 371
Labor off farm		95	80	125
Miscellaneous receipts		---	---	---
Total receipts & net increases	$	$ 5 069	$ 6 492	$ 4 400
EXPENSES AND NET DECREASES				
Farm improvements		217	266	192
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		335	325	366
Feed and grains		---	---	---
Livestock expense		29	34	26
Crop expense		194	220	171
Hired labor		248	262	287
Taxes		264	265	290
Miscellaneous expenses		30	23	30
Total expenses & net decreases	$	$ 1 317	$ 1 395	$ 1 362
RECEIPTS LESS EXPENSES	$	$ 3 752	$ 5 097	$ 3 038
Total unpaid labor		745	645	851
Operator's labor		532	522	533
Family labor		213	123	318
Net income from investment and management		3 007	4 452	2 187
RATE EARNED ON INVESTMENT	%	9.5%	14.2%	6.2%
Return to capital and operator's labor and management		3 539	4 974	2 720
5% of capital invested		1 589	1 571	1 761
LABOR AND MANAGEMENT WAGE	$	$ 1 950	$ 3 403	$ 959

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$23	1	$11	4
21	2	9	7
19	1	7	8
17	2	5	2
15	1	3	0
13	2	1	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net incomes, with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms average 307 acres each, the least successful 275 acres. This difference in size accounts in part for the variation in the average receipts, and expenses in the two groups. Difference in receipts and net increases from grains accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 471	2 156
Average of 10 most successful farms	2 864	3 214
Average of 10 least successful farms	2 489	1 764
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year than the least profitable farms. This is a major factor in accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms in Shelby and Moultrie Counties was $1,686 in 1934, as compared with $462 in 1933, and an inventory loss of $1,134 a farm in 1932. There were increases of $303 in total livestock, $1,248 in feed and grain, and $176 in machinery, while improvements showed a decrease of $41. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 554	$1 857	$ 303	$
Feed and grains	1 922	3 170	1 248	
Machinery	1 265	1 441	176	
Improvements (except residence)	3 293	3 252	-41	
Total	$8 034	$9 720	$1 686	$

Some Adjustments on Shelby and Moultrie County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 25 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,332 a farm in 1934, as compared with $1,908 in 1933. The largest increase in expenditures over the previous year was for machinery and supplies for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting
Farms in Shelby and Moultrie Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 415	$ 752	$	$2 000	$3 656
Feed and grains		301	761		2 139	1 967
Machinery		675	753		164	165
Improvements		176	259		---	---
Labor		248	363		95	73
Miscellaneous		30	28		---	14
Livestock expense		29	47		---	---
Crop expense		194	275		---	---
Taxes		264	347		---	---
Total	$	$2 332	$3 585	$	$4 398	$5 875
Excess of cash sales over expenses				$	$2 066	$2 290
Increase in inventory					1 686	292
Income to labor and capital (Receipts less expenses)					3 752	2 582

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 75 percent of that in 1929, cash expenditures were only 65 percent as large. In 1934 livestock purchases were 55 percent, and feed and grain purchases 40 percent as large as in 1929. In 1934 these farms paid out 90 percent as much for machinery, and 71 percent as much for crop expense as in 1929, while taxes were reduced to 76 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $14.48, as compared with $7.95 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms averaged 32 acres larger and had 10 more crop acres than the least profitable farms. They had a significantly larger acreage of wheat and soybeans, the high yielding crops in 1934. They carried larger inventories of feed and grain on which to make a profit when prices advanced. One reason for the larger inventories was the higher crop yields, there being an advantage of 14.6 bushels of corn, 15.9 bushels of wheat and 3.2 bushels of soybeans in favor of the high-profit group.

Although the most profitable farms had an investment in productive livestock of $4.40 per acre, as compared to $5.96 on the least profitable farms, they fed $1,726 worth of feed per farm in contrast to $1,278 of feed per farm on the least profitable farms. The livestock on the least profitable farms returned $148 for each $100 feed fed, as compared to returns of $119 per $100 feed fed on the most profitable farms. One reason for the higher returns per $100 of feed fed on the least profitable farms was that the major part of their cattle returns was from dairy sales, while the major part of the cattle income on the most profitable farms was from beef sales. Dairy cattle can make very economical use of pasture, the value of which is not included in the above feed costs. The most profitable farms were more efficient with their hog enterprise, having an income of $119 per litter farrowed as contrasted to $89 on the least profitable farms.

The most profitable farms secured their larger income with a total operating cost per acre of $6.64, as compared with $8.05 on the least profitable farms. Man labor costs were $1.24 per crop acre lower, while power and machinery costs were 36 cents per crop acre lower for the most profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A larger percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms were indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	10	$152	5	$70	10	$132	$318
1/3 least profitable farms	10	128	3	98	10	140	237
All accounting farms	31	139	11	95	30	140	308

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received ($308) were more than sufficient to pay all of the 1934 taxes, ($264).

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 24.6 contracted acres which were used as follows: 8.7 idle; 7.6 red clover; 2.5 sweet clover; 2.8 soybeans; .9 alfalfa; and 2.1 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs, in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 31 Shelby and Moultrie County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
Size of farms--acres		271.3	307.4	275.0
Percent of land area tillable		89.0	86.0	92.9
Percent of tillable land in hay and pasture		33.6	29.7	32.8
Gross receipts per acre		18.68	21.12	16.00
Total expenses per acre		7.60	6.64	8.05
Net receipts per acre		11.08	14.48	7.95
Value of land per acre		88	74	96
Total investment per acre		117	102	128
Acres in Corn		64.5	69.5	75.3
Oats		20.7	18.6	22.9
Wheat		20.0	26.7	13.9
Soybeans		42.3	53.5	46.0
Hay		27.7	23.7	27.9
Tillable pasutre		53.4	54.8	55.9
Crop yields--Corn, bu. per acre		30.4	38.4	23.8
Oats, bu. per acre		10.9	10.2	11.3
Wheat, bu. per acre		22.1	28.1	12.2
Soybeans, bu. per acre		27.1	28.5	25.3
Value of feed fed to productive L.S.		1 420	1 726	1 278
Returns per $100 of feed fed to productive livestock		131	119	148
Returns per $100 invested in:				
Cattle		86	90	74
Poultry		237	312	176
Pigs weaned per litter		6.0	7.6	5.3
Income per litter farrowed		93	119	89
Dairy sales per dairy cow		51	62	47
Investment in productive L.S. per A.		4.92	4.40	5.96
Receipts from productive L.S. per A.		6.85	6.66	6.86
Man labor cost per crop acre		5.00	4.11	5.35
Machinery cost per crop acre		1.78	1.55	1.83
Power and mach. cost per crop A.		2.60	2.38	2.74
Farms with tractor		87%	90%	80%
Value of feed fed to horses		183	214	200
Man labor cost per $100 gross income		19	13	24
Expenses per $100 gross income		41	31	50
Farm improvements cost per acre		.80	.87	.70
Excess of sales over cash expenses		2 066	2 609	1 919
Increase in inventory		1 686	2 [illegible]	1 119
Rate earned on investment		9.5%	1[illegible].2%	6.2%
Gross receipts per farm		5 069	6 492	4 400

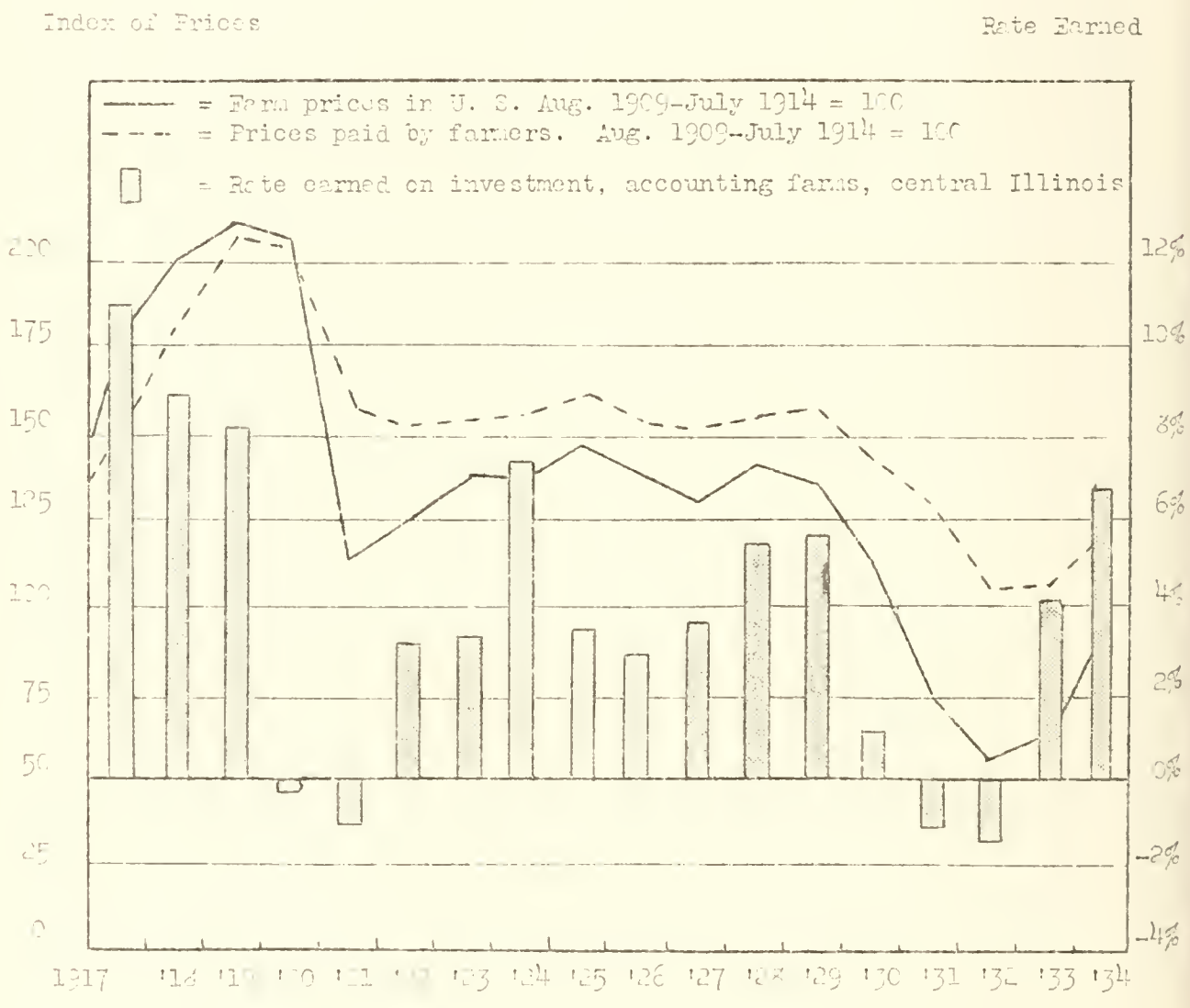
Chart for Studying the Efficiency of Various Parts of Your Business, Shelby and Moultrie Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 31 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Soybeans	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
19.5	55	21	37	128	75	437	180	2.50	--	--	4200	4500	34	10100	520
17.5	50	19	35	121	70	397	170	3.00	.20	3	3700	4000	31	9100	470
15.5	45	17	33	114	65	357	160	3.50	.80	7	3200	3500	28	8100	420
13.5	40	15	31	107	60	317	150	4.00	1.40	11	2700	3000	25	7100	370
11.5	35	13	29	100	55	277	140	4.50	2.00	15	2200	2500	22	6100	320
9.5	30.4	10.9	27.1	93	51	237	131	5.00	2.60	19	1686	2066	18.68	5069	271
7.5	25	9	25	86	45	197	120	5.50	3.20	23	1200	1500	16	4100	220
5.5	20	7	23	79	40	157	110	6.00	3.80	27	700	1000	13	3100	170
3.5	15	5	21	72	35	117	100	6.50	4.40	31	200	500	10	2100	120
1.5	10	3	19	65	30	77	90	7.00	5.00	35	-300	0	7	1100	70
-.5	5	1	17	58	25	37	80	7.50	5.60	39	-800	--	4	0	20

Influence of Price Changes on Farm Earnings

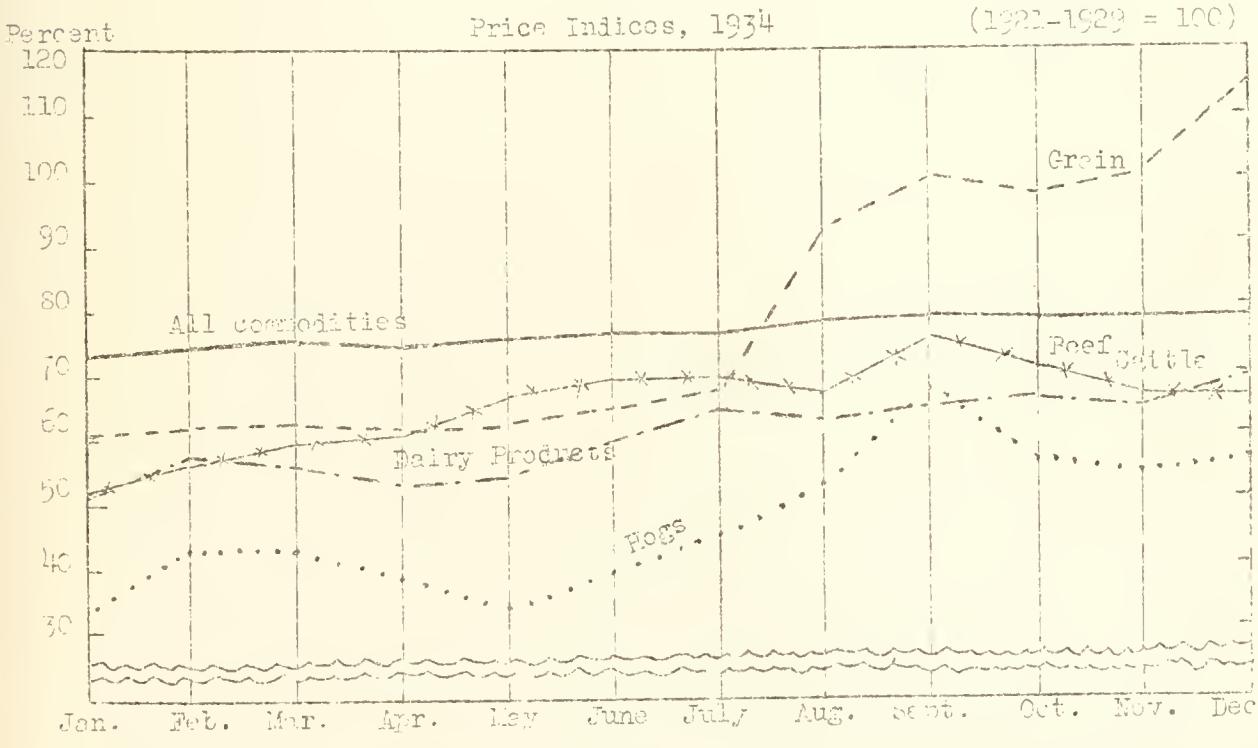
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Shelby and Moultrie Counties for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five. Operating costs per acre were lower than in any year of the five except 1933. Profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Shelby and Moultrie Counties for 1930-1934

Items	1930 1/	1931 2/	1932 3/	1933 4/	1934
Number of farms	61	38	34	30	31
Average size of farms, acres	230	247	282	269	271
Average rate earned, to pay for management, risk and capital	2.3%	-1.5%	-1.0%	3.6%	9.5%
Average labor and management wage	$-648	$-2 304	$-2 238	$ -4	$1 950
Gross income per acre	17.13	6.80	6.41	12.34	18.68
Operating cost per acre	12.39	9.52	7.99	7.35	7.60
Average value of land per acre	158	140	128	110	88
Total investment per acre	210	180	165	138	117
Investment per farm in:					
Total livestock	2 868	2 129	2 302	1 659	1 554
Cattle	1 428	1 004	1 303	906	817
Hogs	702	536	408	310	218
Poultry	142	88	97	65	82
Gross income per farm	3 947	1 680	1 809	3 320	5 069
Income per farm from:					
Crops	1 221	191	192	1 836	3 086
Miscellaneous income	58	73	48	66	--
Total livestock	2 668	1 416	1 569	1 418	1 888
Cattle	464	106	574	268	301
Dairy sales	461	373	249	312	479
Hogs	1 526	800	619	716	804
Poultry	197	133	119	94	72
Average yield of corn in bu.	37	42	53	25	30
Average yield of oats in bu.	40	48	45	17	11

1/ Records from Coles, Vermilion, Edgar, and Douglas counties for 1930.
2/ Records from Coles, Douglas, and Moultrie counties for 1931.
3/ Records from Edgar, Douglas, Coles, and Moultrie counties for 1932.
4/ Records from Shelby, Douglas, Coles, and Moultrie counties for 1933.

ANNUAL FARM BUSINESS REPORT ON FIFTY-SEVEN FARMS IN EDGAR, DOUGLAS, CLARK, AND COLES COUNTIES, ILLINOIS, 1934

P. E. Johnston, A. L. Leonard, and R. C. Ross*

The farm earnings of 57 account-keeping farmers in Edgar, Douglas, Clark, and Coles Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 57 accounts show for 1934 an average net income of $2,816 per farm, as compared with an average of $1,343 in 1933, and an average net loss of $445 in 1932. The average cash income in 1934 was $5,096 per farm, the cash business expenditures $2,557 per farm, leaving a cash balance of $2,539 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $911 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $3,450 per farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* H. D. Van Matre, Ward C. Cannon, R. E. Apple, and E. W. Rusk, farm advisers in Edgar, Douglas, Clark, and Coles counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The prices of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 57 accounting farms the most successful third shows an average net income of $4,393, while the average net income of the least successful third of the farms was only $1,111. In 1933 the comparable net incomes for the two groups was $2,390, and $486 respectively.

Investments, Receipts, Expenses and Earnings on 57
Edgar, Douglas, Clark, and Coles County Farms in 1934

Items	Your farm	Average of 57 farms	19 most profitable farms	19 least profitable farms
CAPITAL INVESTMENTS				
Land		25 369	27 365	21 764
Farm improvements		3 837	3 706	3 459
Livestock total		1 555	1 765	1 502
Horses		382	362	364
Cattle		775	913	807
Hogs		283	388	222
Sheep		33	25	36
Poultry		82	78	73
Machinery and equipment		1 449	1 678	1 161
Feed and grains		1 775	2 123	1 176
Total capital investment	$	$33 085	$36 638	$29 062
RECEIPTS AND NET INCREASES				
Livestock total		2 258	3 159	1 557
Horses		37	27	15
Cattle		748	1 337	435
Hogs (including AAA payments)		956	1 429	622
Sheep		23	16	26
Poultry		84	94	41
Egg sales		123	110	122
Dairy sales		287	146	296
Feed and grains (including AAA payments)		2 418	3 014	1 384
Labor off farm		89	90	32
Miscellaneous receipts		1	1	---
Total receipts & net increases	$	$ 4 766	$ 6 264	$ 2 973
EXPENSES AND NET DECREASES				
Farm improvements		210	195	183
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		303	299	304
Feed and grains		---	---	---
Livestock expense		33	35	45
Crop expense		211	233	192
Hired labor		271	261	221
Taxes		256	244	240
Miscellaneous expenses		32	25	27
Total expenses & net decreases	$	$ 1 316	$ 1 292	$ 1 212
RECEIPTS LESS EXPENSES	$	$ 3 450	$ 4 972	$ 1 761
Total unpaid labor		634	579	650
Operator's labor		476	458	465
Family labor		158	121	185
Net income from investment and management		2 816	4 393	1 111
RATE EARNED ON INVESTMENT	%	8.3%	12.0%	3.8%
Return to capital and operator's labor and management		3 292	4 851	1 576
5% of capital invested		1 699	1 832	1 454
LABOR AND MANAGEMENT WAGE	$	$ 1 593	$ 3 019	$ 122

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$21 and over.	5	$9	7
19	3	7	4
17	4	5	4
15	4	3	5
13	1	1	4
11	2	-1	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest incomes, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 5.

The most successful farms averaged 251 acres each, the least successful 213 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of grains, cattle, and hogs accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	2 523	1 787
Average of 19 most successful farms . .	3 211	2 454
Average of 19 least successful farms. .	1 586	1 093
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. This larger inventory of corn, with the rise in corn prices, was one of the important factors accounting for the difference in farm earnings.

The average inventory increase for the accounting farms included in this report was $911 in 1934, as compared with $462 in 1933, and an inventory loss of $1,134 per farm in 1932. There were increases of $134 in total livestock, $777 in feed and grain, and $72 in machinery, while improvements showed a decrease of $72. Such an increase in inventory, as that for machinery, results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 555	$1 689	$134	$
Feed and grains	1 775	2 552	777	
Machinery	1 449	1 521	72	
Improvements (except residence)	3 837	3 765	-72	
Total	$8 616	$9 527	$911	$

Some Adjustments on Edgar, Douglas, Clark, and Coles County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 53 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,557 a farm in 1934, as compared with $1,908 in 1933. Low crop yields necessitated the purchase of considerably more feed and grain in 1934 than in 1933. Indications point to an expansion of spending for machinery, and repairs for machinery and improvements, since farmers have postponed repairs and replacements for these items during the four-year period since 1930.

Cash Income and Expenses on Accounting Farm in Edgar, Douglas, Clark and Coles Counties, 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 411	$ 649	$	$2 535	$3 797
Feed and grains		653	504		2 294	2 383
Machinery		552	657		177	116
Improvements		138	212		---	---
Labor		271	508		89	35
Miscellaneous		32	38		1	9
Livestock expense		33	50		---	---
Crop expense		211	273		---	---
Taxes		256	430		---	---
Total	$	$2 557	$3 321	$	$5 096	$6 340
Excess of cash sales over expenses				$	$2 539	$3 019
Increase in inventory					911	-58
Income to labor and capital (Receipts less expenses)					3 450	2 961

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 80 percent of that in 1929, cash expenditures were only 77 percent as large. In 1934 livestock purchases were 63 percent as large as in 1929, while feed and grain purchases, due to low crop yields, were 30 percent larger than in 1929. In 1934 these farms paid out 84 percent as much for machinery , and 77 percent as much for crop expense as in 1929, while taxes were reduced to only 60 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $17.48, as compared with $5.22 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms averaged 38.7 acres larger, and produced 12.8 more acres of corn, and 10.9 more acres of soybeans than the least profitable farms. In addition to larger acreages of crops, the most profitable farms produced 10.7 bushels more corn, 7.2 bushels more oats, 10.1 bushels more wheat, and 5 bushels more soybeans per acre than the least profitable farms. The difference in acreages, yields, and inventories was an important factor in accounting for the variation in returns from feed and grains between the most profitable, and the least profitable farms.

The most profitable farms had an investment in productive livestock of $5.26 per acre, and fed $2,190 of feed per farm, as compared with an investment of $5.16 per acre, and $1,161 of feed fed per farm on the least profitable farms. The productibe livestock on the most profitable farms returned $143 for each $100 of feed fed, as compared with a return of $133 per $100 of feed fed on the least profitable farms. The income per litter farrowed was $121 on the most profitable farms. as compared with an income of $76 per litter farrowed on the least profitable farms. The most profitable farms had returns of $167 per $100 invested in cattle, while on the least profitable farms cattle returned only $98 for each $100 invested.

The larger income on the most profitable farms was secured with a total operating cost of $7.45 per acre, as compared with $3.76 per acre for the least profitable farms. On the most profitable farms the man labor costs were $1.60 per crop acre lower, and power and machinery costs were 84 cents per crop acre lower, than on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 books.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	19	$127	12	$114	17	$167	$348
1/3 least profitable farms	17	92	6	58	16	104	188
All accounting farms	54	113	29	105	51	139	285

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms in this report, the payments actually received were $29 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 23.1 contracted acres which were used as follows: 6.9 idle; 3.9 red clover; 2.1 sweet clover; 3.2 soybeans; 1.9 alfalfa; and 5.1 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 57 Edgar, Douglas, Clark, and Coles County Farms in 1934

Items	Your farm	Average of 57 farms	19 most profitable farms	19 least profitable farms
Size of farms--acres		247.6	251.3	212.6
Percent of land area tillable		88.0	91.0	88.0
Percent of tillable land in hay and pasture		34.0	31.0	37.0
Gross receipts per acre		19.53	24.93	13.98
Total expenses per acre		7.68	7.45	8.76
Net receipts per acre		11.37	17.48	5.22
Value of land per acre		102	109	102
Total investment per acre		137	146	138
Acres in Corn		61.1	64.4	51.6
Oats		24.8	22.7	22.7
Wheat		23.4	26.4	25.3
Soybeans		21.6	25.5	14.6
Hay		26.5	20.5	20.7
Tillable pasture		46.9	51.2	43.9
Crop yields--Corn, bu. per acre		33.0	38.7	28
Oats, bu. per acre		19.3	23.7	16.5
Wheat, bu. per acre		22.0	27.5	17.4
Soybeans, bu. per acre		28.0	30.3	25.3
Value of feed fed to productive L.S.		1 678	2 190	1 161
Returns per $100 of feed fed to productive livestock		132	143	135
Returns per $100 invested in:				
Cattle		134	167	98
Poultry		236	240	218
Pigs weaned per litter		5.8	6.3	5.4
Income per litter farrowed		98	121	76
Dairy sales per dairy cow		42	30	42
Investment in productive L.S. per A.		4.92	5.86	5.16
Receipts from productive L.S. per A.		8.97	12.46	7.25
Man labor cost per crop acre		5.00	4.46	6.06
Machinery cost per crop acre		1.76	1.68	2.20
Power and mach. cost per crop A.		2.68	2.58	3.42
Farms with tractor		77%	90%	68%
Value of feed fed to horses		187	176	177
Man labor cost per $100 gross income		18	12	28
Expenses per $100 gross income		41	30	65
Farm improvements cost per acre		.85	.78	.96
Excess of sales over cash expenses		2 539	3 636	1 396
Increase in inventory		911	1 336	365
Rate earned on investment		8.3%	12.0%	3.8%
Gross receipts per farm		4 766	6 261	2 973

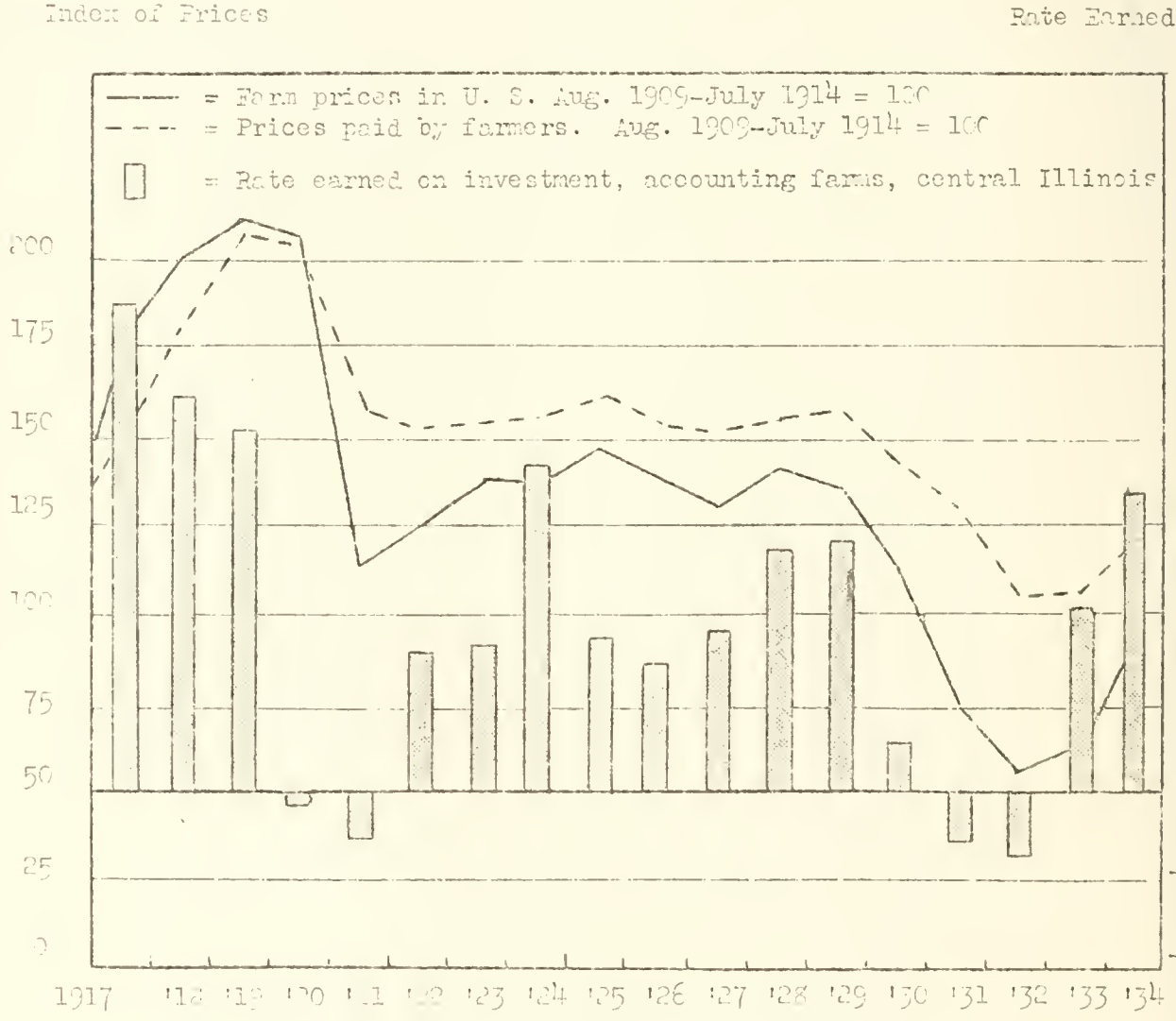
Chart for Studying the Efficiency of Various Parts of Your Business,
Edgar, Douglas, Clark, and Coles Counties 1934

The numbers above the lines across the middle of the page are the averages for the 57 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Wheat	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
5.8	53	34	37	223	72	436	257	--	--	--	3900	7500	35	8800	496
4.3	49	31	34	198	66	396	232	--	.28	--	3300	6500	32	8000	448
2.8	45	28	31	173	60	356	207	.50	.88	0	2700	5500	29	7200	398
1.3	41	25	28	148	54	316	182	2.00	1.48	6	2100	4500	26	6400	348
9.8	37	22	25	123	48	276	157	3.50	2.08	12	1500	3500	23	5600	298
8.3	33	19.3	22	98	42	236	132	5.00	2.68	18	911	2539	19.53	4766	247.6
6.8	29	16	19	73	36	196	107	6.50	3.28	24	300	1500	17	4000	198
5.3	25	13	16	48	30	156	82	8.00	3.88	30	-300	500	14	3200	148
3.8	21	10	13	23	24	116	57	9.50	4.48	36	-900	--	11	2400	98
2.3	17	7	10	--	18	76	32	11.00	5.08	42	-1500	--	8	1800	48
.8	13	4	7	--	12	36	7	12.50	5.68	48	-2100	--	5	1000	--

Influence of Price Changes on Farm Earnings

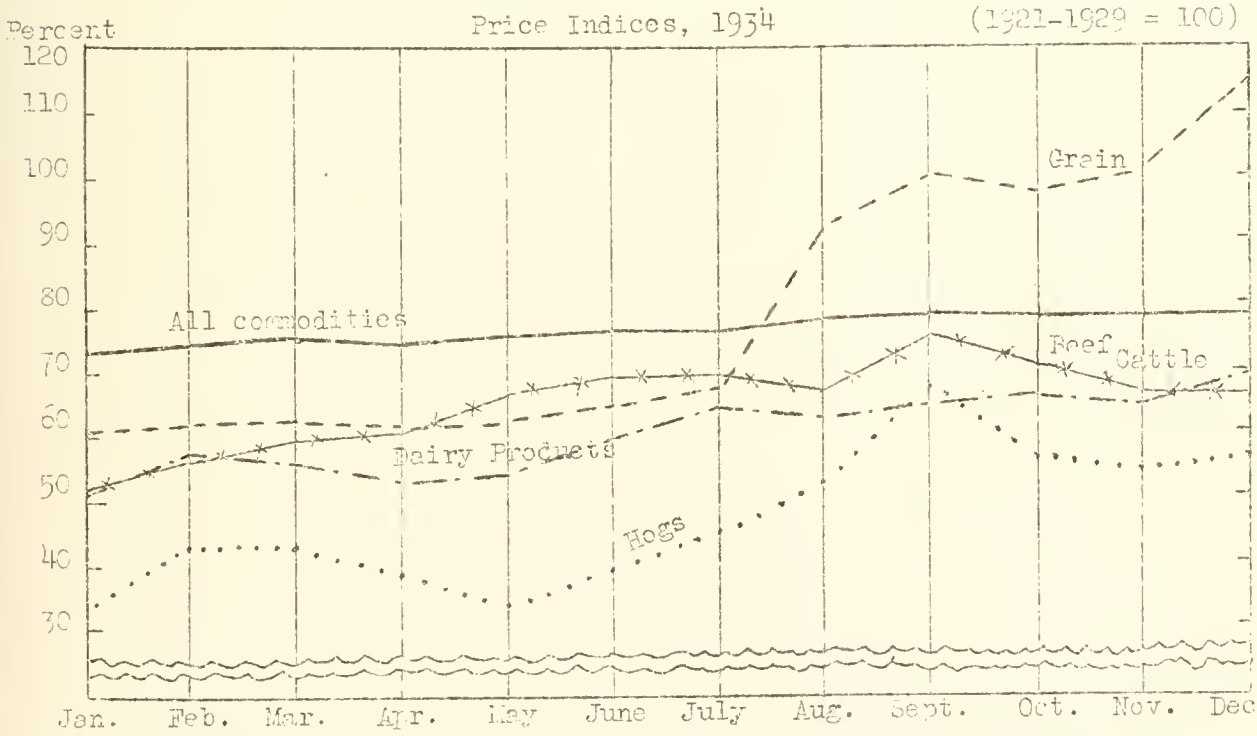
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in this area for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five and were 95 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1928.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Edgar, Douglas, Clark, and Coles Counties for 1930-1934

Items	1930[1]	1931[2]	1932[3]	1933[4]	1934
Number of farms	61	38	34	30	57
Average size of farms, acres	230	247	282	269	248
Average rate earned, to pay for management, risk and acpital	2.3%	-1.5%	-1.0%	3.6%	8.3%
Average labor and management wage	$-648	$-2 304	$-2 238	$ -4	1 593
Gross income per acre	17.13	6.80	6.41	12.34	19.53
Operating cost per acre	12.39	9.52	7.99	7.35	7.38
Average value of land per acre	158	140	128	110	102
Total investment per acre	210	180	165	138	137
Investment per farm in:					
Total livestock	2 868	2 129	2 302	1 659	1 555
Cattle	1 428	1 004	1 303	906	775
Hogs	702	536	408	310	283
Poultry	142	88	97	65	82
Gross income per farm	3 947	1 680	1 809	3 320	4 766
Income per farm from:					
Crops	1 221	191	192	1 836	2 418
Miscellaneous income	58	73	48	66	1
Total livestock	2 668	1 416	1 569	1 418	2 258
Cattle	464	106	574	268	748
Dairy sales	451	373	249	312	287
Hogs	1 526	800	619	716	956
Poultry	197	133	119	94	84
Average yield of corn in bu.	37	42	53	25	33
Average yield of oats in bu.	40	48	45	17	19
Average yield of wheat in bu.	19	29	23	16	22

1/ Records from Coles, Vermilion, Edgar, and Douglas counties for 1930.
2/ Records from Coles, Douglas, and Moultrie counties for 1931.
3/ Records from Edgar, Douglas, Coles, and Moultrie counties for 1932.
4/ Records from Douglas, Moultire, Coles, and Shelby counties for 1933.

ANNUAL FARM BUSINESS REPORT ON FORTY-FIVE FARMS IN MACOUPIN COUNTY, ILLINOIS, 1934

P. E. Johnston, J. E. Wills, and E. L. Sauer*

The farm earnings of 45 account-keeping farmers in Macoupin County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 45 accounts show for 1934 an average net income of $658 per farm, as compared with an average of $388 in 1933, and an average net loss of $410 in 1932. The average cash income in 1934 was $3,121 per farm, the cash business expenditures $1,778 per farm, leaving a cash balance of $1,343 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $86 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,429 per farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

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* W. F. Coolidge, farm adviser in Macoupin County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 45 accounting farms the most successful third shows an average net income of $1,342 as compared with an average net loss of $131 for the least successful third of the farms. In 1933 the most successful farms had a net income of $1,370, while the loss on the least successful farms was $408.

Investments, Receipts, Expenses and Earnings on 45
Macoupin County Farms in 1934

Items	Your farm	Average of 45 farms	15 most profitable farms	15 least profitable farms
CAPITAL INVESTMENTS				
Land		12 544	11 624	12 439
Farm improvements		2 996	3 169	2 296
Livestock total		1 530	1 531	1 268
Horses		392	358	435
Cattle		777	801	533
Hogs		219	209	173
Sheep		55	62	44
Poultry		87	101	83
Machinery and equipment		1 100	1 061	862
Feed and grains		1 111	1 047	909
Total capital investment	$	$19 281	$18 432	$17 774
RECEIPTS AND NET INCREASES				
Livestock total		1 864	2 119	1 212
Horses		17	50	---
Cattle		371	398	222
Hogs (including AAA payments)		660	781	439
Sheep		75	84	70
Poultry		75	107	54
Egg sales		129	141	114
Dairy sales		537	558	313
Feed and grains (including AAA payments)		491	713	379
Labor off farm		72	56	86
Miscellaneous receipts		2	1	2
Total receipts & net increases	$	$ 2 429	$ 2 889	$1 619
EXPENSES AND NET DECREASES				
Farm improvements		138	103	140
Horses		---	---	22
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		314	300	286
Feed and grains		---	---	---
Livestock expense		29	31	32
Crop expense		134	150	115
Hired labor		170	148	49
Taxes		137	149	183
Miscellaneous expenses		28	28	26
Total expenses & net decreases	$	$ 1 000	$ 909	$ 853
RECEIPTS LESS EXPENSES	$	$ 1 429	$ 1 980	$ 826
Total unpaid labor		771	638	957
Operator's labor		527	501	540
Family labor		244	137	417
Net income from investment and management		658	1 342	-131
RATE EARNED ON INVESTMENT	%	3.41%	7.28%	-.74%
Return to capital and operator's labor and management		1 185	1 843	409
5% of capital invested		964	922	889
LABOR AND MANAGEMENT WAGE	$	$ 221	$ 921	$ -480

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15	1	$3	15
13	0	1	7
11	1	-1	8
9	2	-3	1
7	6	-5	1
5	3		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest net incomes should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The total investment on the most profitable farms averaged $18,432, as compared with a total investment of $17,774 on the least profitable farms. The two groups had about the same amount invested in land and improvements combined, but the most profitable farms had a larger investment in productive livestock, and in feed and grains. Differences in receipts from the sales of livestock, livestock products, and grains accounts for much of the difference in income between the two groups. The total farm expense, including the charge for family labor, was $1,547 on the most profitable farms as compared with $1,710 on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934, there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	856	156
Average of 15 most successful farms	1 096	329
Average of 15 least successful farms	493	23
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and end of the year. This larger inventory of corn, with the rise in grain prices, was one of the important factors accounting for the difference in farm earnings.

The average inventory increase for the accounting farms in Macoupin County was $86 in 1934, as compared with inventory losses of $38 a farm in 1933, and $430 a farm in 1932. There were increases of $60 in total livestock, $45 in feed and grain, and $12 in machinery, while improvements showed a decrease of $31. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 530	$1 590	$60	$
Feed and grains	1 111	1 156	45	
Machinery	1 100	1 112	12	
Improvements (except residence)	2 996	2 965	-31	
Total	$6 737	$6 823	$86	$

Some Adjustments on Macoupin County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 40 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,778 a farm in 1934, as compared with $1,503 in 1933. The largest increase in expenditures over the previous year was for machinery and repairs for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Macoupin County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 251	$1 058	$	$2 055	$4 576
Feed and grains		447	775		893	1 200
Machinery		421	739		95	151
Improvements		111	320		4	1
Labor		170	512		72	97
Miscellaneous		28	33		2	37
Livestock expense		29	57		---	---
Crop expense		134	217		---	---
Taxes		187	283		---	---
Total	$	$1 778	$3 994	$	$3 121	$6 062
Excess of cash sales over expenses				$	$1 343	$2 068
Increase in inventory					86	566
Income to labor and capital (Receipts less expenses)					1 429	2 634

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 51 percent of that in 1929, cash expenditures were only 44% as large. In 1934 livestock purchases were 24 percent, and feed and grain purchases 58 percent as large as in 1929. In 1934 these farms paid out 57 percent as much for machinery, and 62 percent as much for crop expense as in 1929, while taxes were reduced to 66 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $6.52, as compared with a net loss of 58 cents per acre for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms had larger inventories of productive livestock, and feed and grains on which to make a profit when prices advanced. One reason for the larger inventories, however, was the higher crop yields, there being an advantage of 8.8 bushels of corn, 5.4 bushels of oats, 7.1 bushels of wheat, and 7.1 bushels of soybeans per acre in favor of the highest profit group. The higher yields on the most profitable farms more than offset the smaller acreage of wheat and soybeans on these farms. Crop yields were so low on the least profitable farms that there was an average inventory loss of $95 per farm in spite of the price advance.

The most profitable farms were more intensive, and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $6.14 per acre, and fed $1,479 of feed per farm, as compared with $3.68 invested per acre, and $1,104 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $139 for each $100 of feed fed, as compared with a return of $110 for each $100 of feed fed on the least profitable farms. Difference in livestock efficiency is further illustrated by the fact that on the most profitable farms the dairy sales were $33 per cow higher, and the income per litter farrowed $25 higher than on the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $7.51 per acre, as compared with $7.95 per acre on the least profitable farms. Man labor costs per crop acre were $5.54 on the most profitable farms, as compared with $6.53 per crop acre on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	13	$85	5	$108	13	$133	$225
1/3 least profitable farms	12	89	6	118	13	107	211
All accounting farms	40	97	23	95	41	115	239

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms in this area, the payments actually received were $52 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of contracted acres on the accounting farms in this area. The average farm had 19.2 contracted acres which were used as follows: 12.6 idle; .3 red clover; 1.4 sweet clover; 4.2 mixed clover; .5 alfalfa, and .4 acres were in other crops. When the government restrictions on the use of crops grown on contracted acres were removed, the legume crops were the most profitable as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chingh bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 45 Macoupin County Farms in 1934

Items	Your farm	Average of 45 farms	15 most profitable farms	15 least profitable farms
Size of farms--acres		227.5	205.9	227.9
Percent of land area tillable		82.6	85.2	79.6
Percent of tillable land in hay and pasture		42.5	44.2	37.8
Gross receipts per acre		10.68	14.03	7.37
Total expenses per acre		7.79	7.51	7.95
Net receipts per acre		2.89	6.52	-.58
Value of land per acre		55	56	55
Total investment per acre		85	90	78
Acres in Corn		44.8	44.2	42.6
Oats		14.2	14.1	12.6
Wheat		27.2	19.1	29.9
Soybeans		17.2	13.9	21.7
Hay		37.0	33.7	36.3
Tillable pasture		42.9	43.9	32.4
Crop yields--Corn, bu. per acre		8.1	14.0	5.2
Oats, bu. per acre		8.5	11.3	5.9
Wheat, bu. per acre		21.6	25.6	18.5
Soybeans, bu. per acre		15.5	19.2	11.7
Value of feed fed to productive L.S.		1 449	1 479	1 104
Returns per $100 of feed fed to productive livestock		127	139	110
Returns per $100 invested in:				
Cattle		114	111	99
Poultry		234	241	213
Pigs weaned per litter		6.3	6.4	6.1
Income per litter farrowed		78	81	56
Dairy sales per dairy cow		65	78	45
Investment in productive L.S. per A.		5.11	6.14	3.68
Receipts from productive L.S. per A.		8.12	10.05	5.32
Man labor cost per crop acre		6.21	5.54	6.53
Machinery cost per crop acre		2.16	2.27	1.92
Power and mach. cost per crop A.		3.50	3.32	3.33
Farms with tractor		67%	80%	60%
Value of feed fed to horses		210	187	188
Man labor cost per $100 gross income		37	25	58
Expenses per $100 gross income		73	54	108
Farm improvements cost per acre		.61	.50	.61
Excess of sales over cash expenses		1 343	1 620	921
Increase in inventory		86	360	-95
Rate earned on investment		3.41%	7.28%	-.74%
Gross receipts per farm		2 429	2 889	1 679

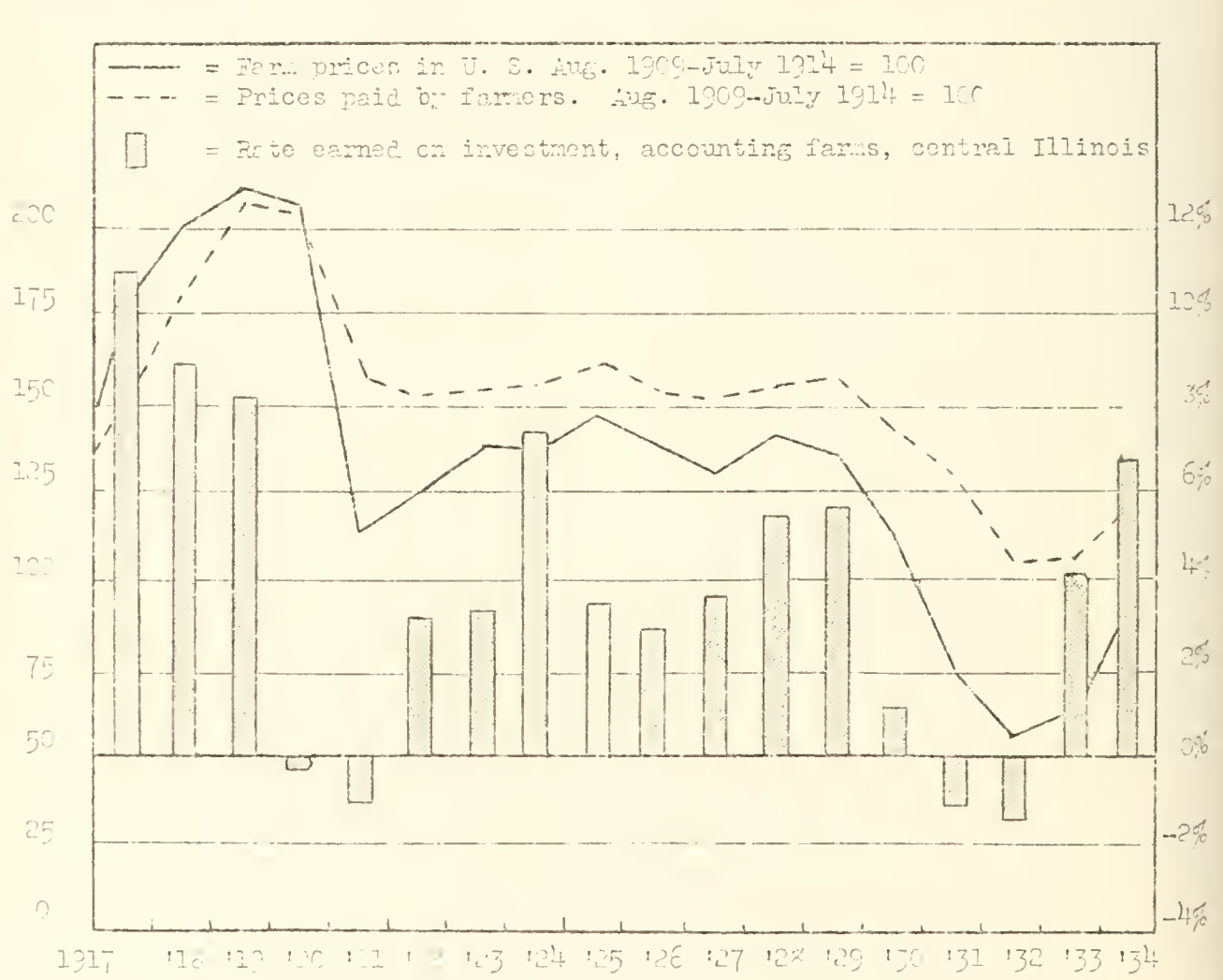
Chart for Studying the Efficiency of Various Parts of Your Business,
Macoupin County 1934

The numbers above the lines across the middle of the page are the averages for the 45 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
13.4	18	24	37	178	130	434	252	--	--	--	2036	3300	21	7400	430
11.4	16	21	34	158	133	394	227	--	--	5	1586	2900	19	6400	390
9.4	14	18	31	138	116	354	202	.81	--	13	1286	2500	17	5400	350
7.4	12	15	28	118	99	314	177	2.61	46	21	886	2100	15	4400	310
5.4	10	12	25	98	82	274	152	4.41	1.31	29	486	1700	13	3400	270
3.41	8.1	8.5	21.6	78	65	234	127	6.21	2.16	37	86	1343	10.68	2429	227.5
1.4	6	6	19	58	48	194	102	8.01	3.01	45	-314	900	9	1400	190
-.6	4	3	16	38	31	154	77	9.81	3.86	53	-714	500	7	400	150
-2.6	2	0	13	18	14	114	52	11.61	4.71	61	-1114	100	5	--	110
-4.6	0	--	10	--	--	74	27	13.41	5.56	69	-1514	--	3	--	70
-6.6	--	--	7	--	--	34	2	15.21	6.41	77	-1914	--	1	--	30

Influence of Price Changes on Farm Earnings

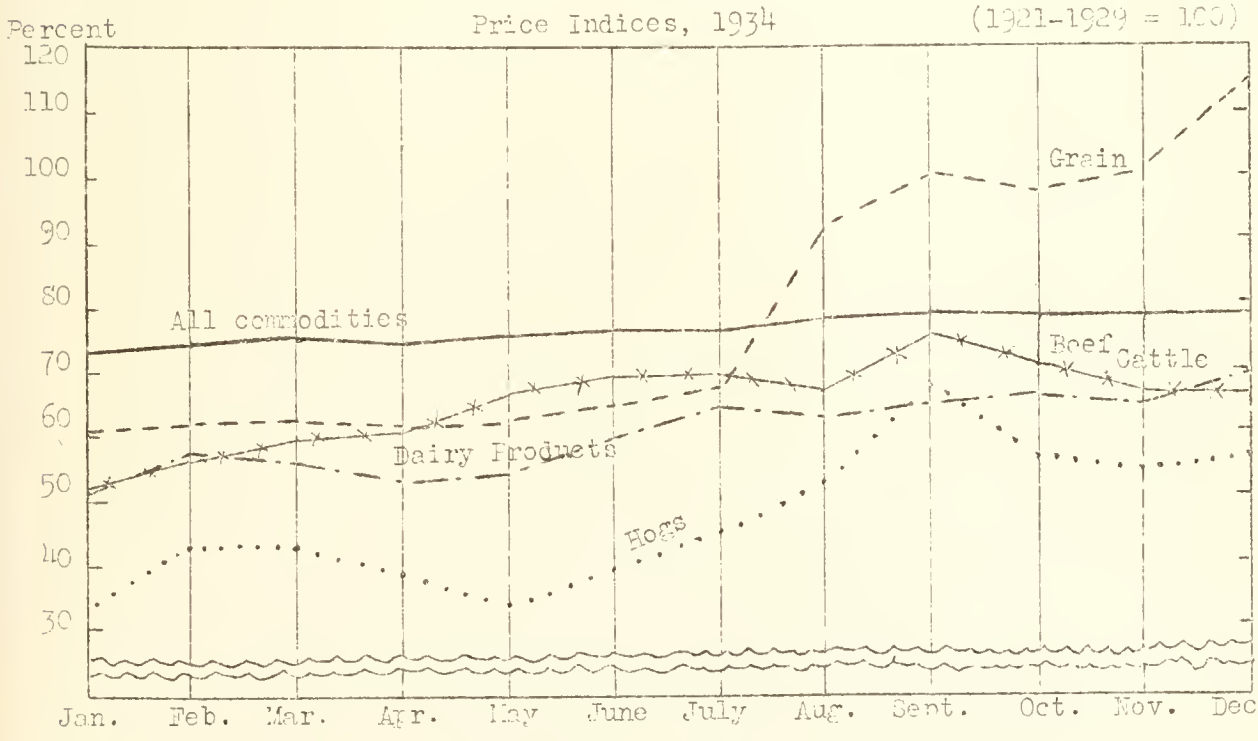
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

A comparison of production, income, and expenditures on the accounting farms in Macoupin County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last four and were 54 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Macoupin County for 1930-1934

Items	1930 1/	1931	1932 1/	1933 2/	1934
Number of farms	28	33	42	30	45
Average size of farms, acres	207	221	208	209	228
Average rate earned, to pay for management, risk and capital	2.8%	-3.2%	-2.1%	2.1%	3.41%
Average labor and management wage	$ 3	$-1 587	$-916	$-43	$221
Gross income per acre	15.00	7.31	6.02	9.25	10.68
Operating cost per acre	11.27	11.12	7.99	7.39	7.79
Average value of land per acre	89	76	61	56	55
Total investment per acre	134	119	95	89	85
Investment per farm in :					
Total livestock	2 520	2 640	1 788	1 799	1 530
Cattle	1 211	1 488	850	1 034	777
Hogs	598	516	326	240	219
Poultry	151	139	115	108	87
Gross income per farm	3 109	1 617	1 252	1 930	2 429
Income per farm from:					
Crops	434	---	---	296	491
Miscellaneous income	67	20	52	59	2
Total livestock	2 608	1 556	1 200	1 575	1 864
Cattle	254	260	127	440	371
Dairy sales	797	417	405	331	537
Hogs	1 290	601	512	593	660
Poultry	250	213	126	116	75
Average yield of corn in bu.	29	33	50	22	8
Average yield of wheat in bu.	17	26	15	15	22

1/ Records from Jersey and Macoupin Counties for 1930 and 1932.
2/ Records from Macoupin and Montgomery Counties for 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-TWO FARMS IN JERSEY COUNTY, ILLINOIS, 1934

P. E. Johnston, J. E. Wills, and E. L. Sauer*

Farm earnings on the 32 accounting farms in Jersey County averaged 3.3 percent for 1934, which is the second highest return during the past five years. 1933 was highest with an average return of 3.6 percent. The 1934 return is remarkable considering the severe drouth and chinch bug damage.

These 32 accounts show for 1934 an average net income of $670 per farm, as compared with an average of $806 in 1933, and an average net loss of $410 in 1932. The average cash income in 1934 was $2,998 per farm, the cash business expenditures $1,490 per farm, leaving a cash balance of $1,508 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) The low yields were directly responsible for the decrease in inventory of $53 a farm. This decrease, deducted from the cash balance, resulted in an average excess of receipts over expenses of $1,455 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*C. T. Kibler, farm adviser in Jersey County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934, as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 32 accounting farms the most successful third shows an average net income of $1,673, while the least successful third had a net loss of $295. In 1933 the two groups had favorable net incomes of $1,567 and $147 respectively.

Investments, Receipts, Expenses and Earnings on 32
Jersey County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
CAPITAL INVESTMENTS				
Land		13 192	16 281	9 990
Farm improvements		2 900	3 649	2 192
Livestock total		1 457	1 680	1 119
Horses		414	462	343
Cattle		659	771	495
Hogs		281	350	184
Sheep		37	24	43
Poultry		66	73	54
Machinery and equipment		1 336	1 876	929
Feed and grains		1 291	1 657	813
Total capital investment	$	$20 176	$25 143	$15 043
RECEIPTS AND NET INCREASES				
Livestock total		1 766	2 388	959
Horses		4	18	---
Cattle		225	278	126
Hogs (including AAA payments)		841	1 272	349
Sheep		40	21	33
Poultry		55	51	39
Egg sales		87	122	58
Dairy sales		514	626	354
Feed and grains (including AAA payments)		579	1 154	252
Labor off farm		83	90	95
Miscellaneous receipts		6	14	---
Total receipts & net increases	$	$ 2 434	$ 3 646	$ 1 306
EXPENSES AND NET DECREASES				
Farm improvements		224	220	248
Horses		---	---	2
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		279	344	235
Feed and grains		---	---	---
Livestock expense		21	31	7
Crop expense		129	186	77
Hired labor		108	166	37
Taxes		187	205	157
Miscellaneous expenses		31	26	30
Total expenses & net decreases	$	$ 979	$ 1 178	$ 793
RECEIPTS LESS EXPENSES	$	$ 1 455	$ 2 468	$ 513
Total unpaid labor		785	795	808
Operator's labor		509	540	491
Family labor		276	255	317
Net income from investment and management		670	1 673	-295
RATE EARNED ON INVESTMENT	%	3.32%	6.65%	-1.96%
Return to capital and operator's labor and management		1 179	2 213	196
5% of capital invested		1 009	1 258	752
LABOR AND MANAGEMENT WAGE	$	$ 170	$ 955	$ -556

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15	1	$ 1	1
11	1	-1	5
9	1	-3	2
7	4	-5	2
5	6	-7	1
3	8		

A further study of the farm businesses, made by comparing the investments, receipts and expenses of the group of farms having the highest net income with those having the lowest net income, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 232 acres each, the least successful 168 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of hogs, grains, and dairy sales accounts for much of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	1 473	284
Average of 11 most successful farms	1 982	465
Average of 11 least successful farms	753	40
Your farm		

The most profitable farms had a much larger inventory of corn, both at the beginning and end of the year. With the rapid rise in corn prices, this was an important factor in accounting for the difference in returns from feed and grains.

The 32 Jersey County farms show an average inventory decrease of $53. The 1933 inventory values increased $117, while in 1932 there was an inventory loss of $430. In 1934 there were decreases of $97 in improvements, $62 in livestock, and $32 in machinery. Feed and grains showed an increase of $138. The inventory decreases in machinery was the smallest since 1929, and indicates that needed repairs and replacements are being made, but still not enough to offset current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 457	$1 395	$-62	$
Feed and grains	1 291	1 429	138	
Machinery	1 336	1 304	-32	
Improvements (except residence)	2 900	2 803	-97	
Total	$6 984	$6 931	$-53	$

Some Adjustments on Jersey County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1930 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 45 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,490 a farm in 1934, as compared with $1,383 in 1933. The largest increase in cash expenses over the previous year was for machinery and repairs for machinery. Low crop yields necessitated the purchase of considerably more feed and grain in 1934 than in 1933. Indications point to an expansion of spending in 1935 for machinery and improvements, since farmers have postponed repairs and replacements for these items during the four-year period since 1930.

Cash Income and Expenses on Accounting Farms in Jersey County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 168	$1 058	$	$1 996	$4 576
Feed and grains		335	775		776	1 200
Machinery		384	739		137	151
Improvements		127	320		---	1
Labor		108	512		83	97
Miscellaneous		31	33		6	37
Livestock expense		21	57		---	---
Crop expense		129	217		---	---
Taxes		187	283		---	---
Total	$	$1 490	$3 994	$	$2 998	$6 062
Excess of cash sales over expenses				$	$1 508	$2 068
Increase in inventory					-53	566
Income to labor and capital (Receipts less expenses)					1 455	2 634

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 49 percent of that in 1929, cash expenditures were only 37 percent as large. In 1934 livestock purchases were 16 percent, and feed and grain purchases 43 percent as large as in 1929. In 1934 these farms paid out 52 percent as much for machinery, 40 percent as much for improvements, and 59 percent as much for crop expense as in 1929, while taxes wer were reduced to 66 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $7.22, as compared with a loss of $1.76 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were larger and carried larger inventories of both crops and livestock on which to make a profit when prices advanced. The most successful farms had 26.5 more acres of corn, 15.8 more acres of wheat, 13 more acres of soybeans, 8.2 more acres of oats, and 7 more acres of hay than the least profitable farms. In addition to the larger acreage of crops, they had higher yields, having 14.4 bushels more oats, 7.2 bushels more wheat, 7.1 bushels more soybeans and 1.6 bushels more corn per acre than the least profitable. Differences in acreage of wheat and soybeans, the high yielding crops in 1934, was an important factor in accounting for the variation in returns from feed and grains between the most profitable, and the least profitable farms.

The most profitable farms were more intensive and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $5.21 per acre, and fed $2,071 of feed per farm, as compared to $4.37 invested per acre, and $871 of feed fed per farm on the least profitable farms. The most profitable farms had returns of $114 per $100 of feed fed, while the least profitable farms had returns of $110 per $100 of feed fed. There was an income of $95 per litter farrowed on the most profitable farms, while the least profitable group received only $45 per litter. The most profitable farms had dairy sales per dairy cow of $80, as compared with $41 for the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $8.52 per acre, as compared with $9.54 per acre for the least profitable farms. The man labor costs were $2.96 per crop acre lower, while power and machinery costs were 41 cents per crop acre lower for the most successful farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	11	$100	6	$150	11	$174	$355
1/3 least profitable farms	10	54	5	136	9	103	196
All accounting farms	30	78	19	127	29	148	283

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average of all accounting farms in Jersey County in 1934, the payments actually received were $96 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 17.4 contracted acres which were used as follows: 3.1 idle; 1.7 red clover; 3.0 sweet clover, 5.6 soybeans and cowpeas; .4 alfalfa and 3.6 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops, as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 32 Jersey County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
Size of farms--acres	———	202.0	232.0	168.0
Percent of land area tillable	———	81.0	84.0	73.0
Percent of tillable land in hay and pasture	———	37.0	30.0	43.0
Gross receipts per acre	———	12.07	15.74	7.78
Total expenses per acre	———	8.75	8.52	9.54
Net receipts per acre	———	3.32	7.22	-1.76
Value of land per acre	———	65	70	60
Total investment per acre	———	100	109	90
Acres in Corn	———	44.6	57.5	31.0
Oats	———	13.7	16.1	7.9
Wheat	———	32.5	42.5	26.7
Soybeans	———	7.1	14.4	1.4
Hay	———	24.7	29.5	22.5
Tillable pasture	———	35.3	29.8	29.9
Crop yields--Corn, bu. per acre	———	8.5	6.8	5.2
Oats, bu. per acre	———	13.8	22.1	7.7
Wheat, bu. per acre	———	20.9	24.0	16.8
Soybeans, bu. per acre	———	13.5	17.1	10.0
Value of feed fed to productive L.S.	———	1 570	2 071	871
Returns per $100 of feed fed to productive livestock	———	112	114	110
Returns per $100 invested in: Cattle	———	112	117	98
Poultry	———	209	234	176
Pigs weaned per litter	———	6.5	6.5	6
Income per litter farrowed	———	78	95	45
Dairy sales per dairy cow	———	60	80	41
Investment in productive L.S. per A.	———	5.01	5.21	4.37
Receipts from productive L.S. per A.	———	8.74	10.23	5.72
Man labor cost per crop acre	———	6.67	5.57	8.53
Machinery cost per crop acre	———	2.18	2.07	2.55
Power and mach. cost per crop A.	———	3.82	3.65	4.06
Farms with tractor	———	47%	55%	36%
Value of feed fed to horses	———	213	280	138
Man labor cost per $100 gross income	———	35	25	60
Expenses per $100 gross income	———	72	54	123
Farm improvements cost per acre	———	1.11	.95	1.48
Excess of sales over cash expenses	———	1 508	1 959	828
Increase in inventory	———	-53	509	-315
Rate earned on investment	———	3.32%	6.65%	-1.96%
Gross receipts per farm	———	2 434	3 646	1 306

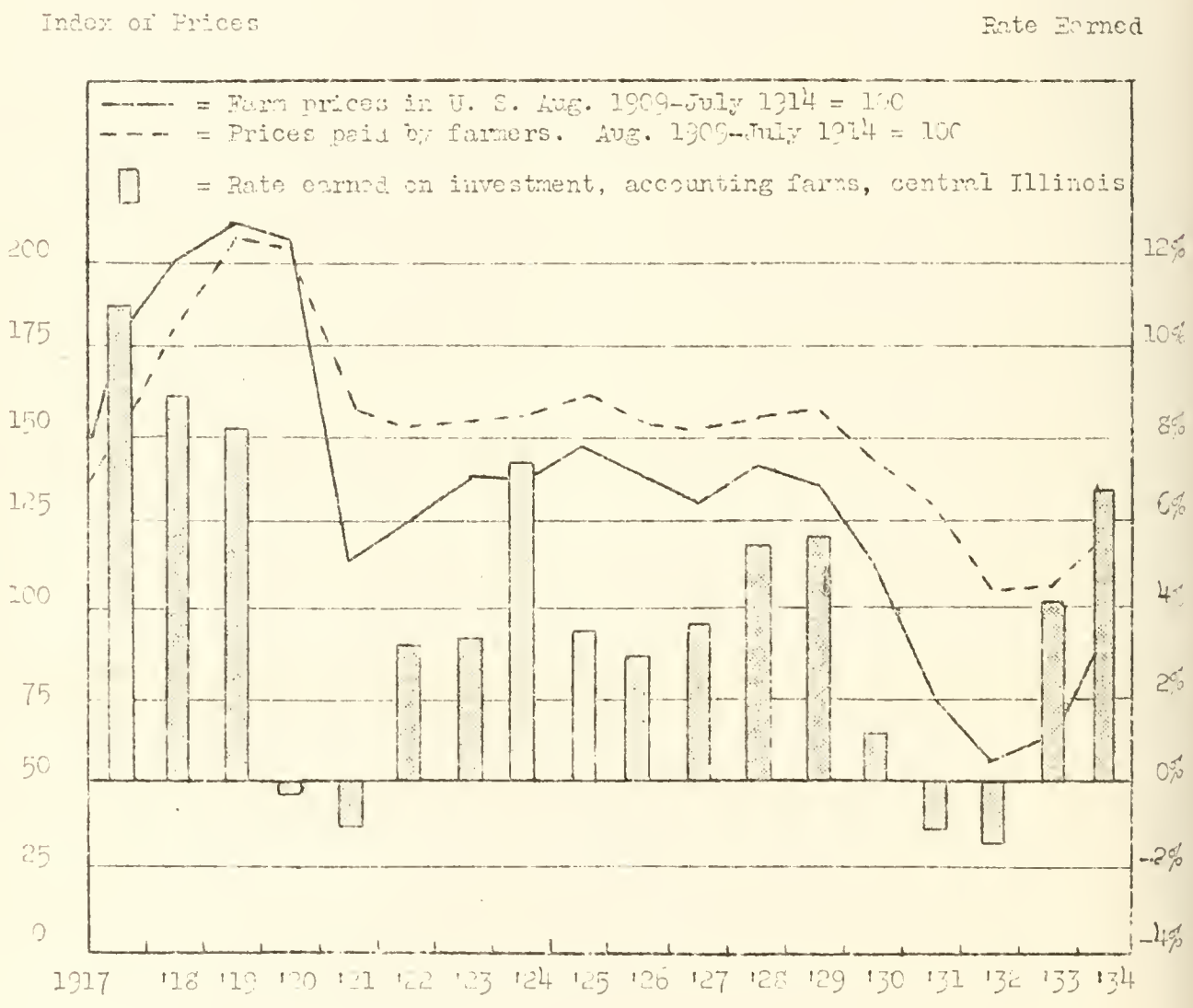
Chart for Studying the Efficiency of Various Parts of Your Business, Jersey County, 1934

The numbers above the lines across the middle of the page are the averages for the 32 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
13.3	23	34	31	138	110	409	237	--	--	--	1447	6500	22	5400	400
11.3	20	30	29	126	100	369	212	1.07	--	--	1147	5500	20	4800	360
9.3	17	26	27	114	90	329	187	2.47	.22	--	847	4500	18	4200	320
7.3	14	22	25	102	80	289	162	3.87	1.42	11	547	3500	16	3600	280
5.3	11	18	23	90	70	249	137	5.27	2.62	23	247	2500	14	3000	240
3.32	8.5	13.8	20.9	78	60	209	112	6.67	3.82	35	-53	1508	12.07	2434	202
1.3	5	10	19	66	50	169	87	8.07	5.02	47	-353	500	10	1800	160
-.7	2	6	17	54	40	129	62	9.47	6.22	59	-653	-500	8	1200	120
-2.7	--	2	15	42	30	89	37	10.87	7.42	71	-953	--	6	600	80
-4.7	--	--	13	30	20	49	12	12.27	8.62	83	-1253	--	4	--	40
-6.7	--	--	11	18	10	9	--	13.67	9.82	95	-1553	--	2	--	--

Influence of Price Changes on Farm Earnings

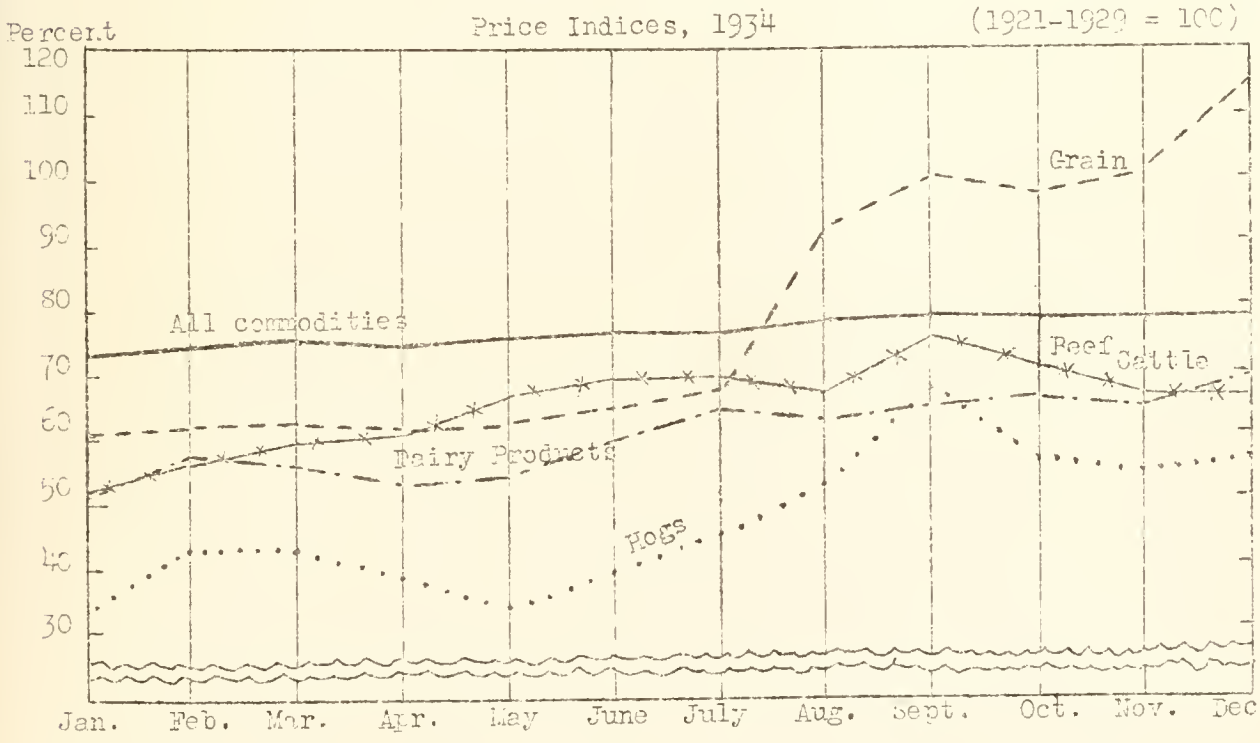
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Jersey County for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Jersey County for 1930-1934

Items	1930[1/]	1931	1932[1/]	1933[2/]	1934
Number of farms	28	33	42	32	32
Average size of farms, acres	207	204	208	207	202
Average rate earned, to pay for management, risk and capital	2.8%	-2.2%	-2.1%	3.6%	3.3%
Average labor and management wage	$ 3	$-1 272	$ -916	$ 154	$ 170
Gross income per acre	15.00	7.35	6.02	12.20	12.07
Operating cost per acre	11.27	10.11	7.99	8.30	8.75
Average value of land per acre	89	86	61	73	65
Total investment per acre	134	126	95	108	100
Investment per farm in:					
Total livestock	2 520	2 092	1 788	1 721	1 457
Cattle	1 211	921	850	874	659
Hogs	598	562	326	360	281
Poultry	151	125	115	64	66
Gross income per farm	3 109	1 499	1 252	2 525	2 434
Income per farm from:					
Crops	434	25	---	796	579
Miscellaneous income	67	47	52	31	c
Total livestock	2 608	1 427	1 200	1 698	1 766
Cattle	254	---	127	295	225
Dairy sales	797	473	405	434	514
Hogs	1 290	787	512	846	841
Poultry	250	162	128	96	55
Average yield of corn in bu.	29	35	50	37	8
Average yield of oats in bu.	32	43	32	28	14
Average yield of wheat in bu.	17	26	15	18	21

1/ Records from Jersey and Macoupin Counties included for 1930 and 1932.
2/ Records from Jersey and Greene Counties included for 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-ONE FARMS IN SANGAMON COUNTY, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and J. E. Wills*

The farm earnings of 31 account-keeping farmers in Sangamon County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 31 accounts show for 1934 an average net income of $2,068 per farm, as compared with an average of $1,393 in 1933, and an average net loss of $545 in 1932. The average cash income in 1934 was $5,338 per farm, the cash business expenditures $3,039 per farm, leaving a cash balance of $2,299 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $386 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,685 per farm. The inventory increase was a much smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* Edwin Bay, farm adviser in Sangamon County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand, the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 31 accounting farms the most successful third shows an average net income of $3,377, while the average net income of the least successful third of the farms was only $388. In 1933 the comparable net incomes for the two groups was $2,433, and $404 respectively.

Investments, Receipts, Expenses and Earnings on 31 Sangamon County farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
CAPITAL INVESTMENTS				
Land		31 607	29 491	28 340
Farm improvements		4 073	4 490	3 501
Livestock total		2 281	1 888	2 377
Horses		510	496	424
Cattle		1 166	869	1 226
Hogs		465	402	564
Sheep		80	69	80
Poultry		60	52	83
Machinery and equipment		1 434	1 275	1 653
Feed and grains		1 578	1 899	1 441
Total capital investment	$	$40 973	$39 043	$37 312
RECEIPTS AND NET INCREASES				
Livestock total		3 017	3 401	2 888
Horses		56	32	20
Cattle		954	948	997
Hogs (including AAA payments)		1 573	1 982	1 426
Sheep		112	141	106
Poultry		60	68	75
Egg sales		78	72	119
Dairy sales		184	158	145
Feed and grains (including AAA payments)		1 160	2 140	---
Labor off farm		76	128	59
Miscellaneous receipts		---	---	---
Total receipts & net increases	$	$ 4 253	$ 5 669	$ 2 947
EXPENSES AND NET DECREASES				
Farm improvements		297	326	276
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		373	355	435
Feed and grains		---	---	322
Livestock expense		43	59	44
Crop expense		178	212	160
Hired labor		354	420	335
Taxes		290	292	266
Miscellaneous expenses		33	35	31
Total expenses & net decreases	$	$ 1 568	$ 1 699	$ 1 869
RECEIPTS LESS EXPENSES	$	$ 2 685	$ 3 970	$ 1 078
Total unpaid labor		617	593	590
Operator's labor		488	459	513
Family labor		129	134	177
Net income from investment and management		2 068	3 377	388
RATE EARNED ON INVESTMENT	%	5.05%	8.65%	1.04%
Return to capital and operator's labor and management		2 556	3 836	901
% of capital invested		2 048	1 952	1 365
LABOR AND MANAGEMENT WAGE	$	$ 508	$ 1 884	$ -464

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$17	2	$ 5	3
15	1	3	4
13	2	1	2
11	5	-1	1
9	4	-3	1
7	5	-5	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net incomes with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 273 acres each, the least successful 267 acres. The most successful farms had total capital investments of $39,043, and total receipts and net increases of $5,569 per farm, as compared with total capital investments of $37,312, and total receipts and net increases of $2,947 per farm on the least successful farms. Differences in receipts from feed and grains and hogs accounts for most of the difference in income between the two groups. The most profitable farms secured their larger income with less expense, their total farm expense, including the charge for family labor, being $2,292 per farm, as compared with total farm expenditures of $2,359 per farm on the least successful farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 279	996
Average of 10 most successful farms	2 852	1 506
Average of 10 least successful farms	2 004	615
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. This was an important factor in accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms in Sangamon County was $386 in 1934, as compared with $652 in 1933, and an inventory loss of $1,105 per farm in 1932. There were increases of $123 in total livestock, and $431 in feed and grains, while machinery showed a decrease of $23, and improvements, $145. The inventory decrease in machinery was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made, but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 281	$2 404	$123	$
Feed and grains	1 578	2 009	431	
Machinery	1 434	1 411	-23	
Improvements (except residence)	4 073	3 928	-145	
Total	$9 366	$9 752	$386	$

Some Adjustments on Sangamon County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1934, farm operating costs declined each year. Total operating expenses were 46 cents an acre lower in 1934 than in 1933, while cash operating expenses were $3,039 a farm in 1934 as compared with $2,267 in 1933. The largest increases in expenditures over the previous year were for feed and grain, and for machinery and supplies for machinery. Indications point to an increase of spending in 1935 for repairs and replacement of machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Sangamon County
1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 563	$1 161	$	$3 457	$4 893
Feed and grains		954	936		1 683	2 430
Machinery		465	647		115	83
Improvements		159	308		7	---
Labor		354	632		76	50
Miscellaneous		33	42		---	7
Livestock expense		43	68		---	---
Crop expense		178	312		---	---
Taxes		290	441		---	---
Total	$	$3 039	$4 545	$	$5 338	$7 513
Excess of cash sales over expenses				$	$2 299	$2 968
Increase in inventory					386	919
Income to labor and capital (Receipts less expenses)					2 685	3 887

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. The average cash income in 1934 was 71 percent of that in 1929, while the average cash expenditures were 67 percent as large as in 1929. In 1929 the average accounting farm in Sangamon County spent 61 percent of the cash income for operating expenses; in 1934 they spent 57 percent. The relationship between income and expenses is approximately the same for the two years. There is, however, considerable difference in the distribution of the expense items. In 1934, livestock purchases were 48 percent, and feed and grain purchases 102 percent of the 1929 expenditures. In 1934 these farms paid 72 percent as much for machinery, and 57 percent as much for crop expense as in 1929, while taxes were reduced to 66 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $12.35, as compared with $1.45 per acre for the least profitable group. The reason for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were larger, and carried larger inventories of feed and grain on which to make a profit when the prices advanced. One reason for the larger inventories, however, was the higher crop yields, there being an advantage of 15.7 bushels of corn, 2.7 bushels of oats, 8.3 bushels of wheat, and 14.1 bushels of soybeans in favor of the high profit farms. Crop yields were so low on the least profitable farms that, in spite of the advance in prices of these items, they had an average inventory decrease in the feed and grain account of $124 per farm, while the most profitable farms had an average inventory increase in feed and grains of $896 per farm.

The most profitable farms had an investment in productive livestock of $5.82 per acre, and fed $2,212 of feed per farm, as compared with $7.44 invested per acre and $2,308 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $152 for each $100 of feed fed, as compared with a return of $124 for each $100 of feed fed on the least profitable farms. The income per litter farrowed was $85 on the most profitable farms, as compared with $75 on the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $8.39 per acre, as compared with $9.58 per acre on the least profitable farms. Man labor costs per crop acre were $4.93 on the most profitable farms, as compared with $5.06 on the least profitable farms, while power and machinery costs per crop acre amounted to $3.42 on the most profitable farms, and $3.62 on the least profitable farms.

The Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	10	$132	6	$214	8	$276	$482
1/3 least profitable farms	8	130	7	114	8	130	289
All accounting farms	29	145	18	220	27	205	442

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $152 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 22.8 contracted acres which were used as follows: 16.9 idle; 1.2 mixed clover; 3.5 sweet clover; and 1.2 soybeans. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in the drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 31 Sangamon County Farms in 1934

Items	Your farm	Average of 31 farms	10 most profitable farms	10 least profitable farms
Size of farms--acres	____	275.5	273.3	267.1
Percent of land area tillable	____	92.4	92.5	92.8
Percent of tillable land in hay and pasture	____	37.1	42.2	33.7
Gross receipts per acre	____	15.44	20.74	11.03
Total expenses per acre	____	7.93	8.39	9.58
Net receipts per acre	____	7.51	12.35	1.45
Value of land per acre	____	114	108	106
Total investment per acre	____	149	143	140
Acres in Corn	____	72.6	72.3	75.6
Oats	____	29.7	28.9	29.9
Wheat	____	28.5	22.4	30.3
Soybeans	____	22.6	13.8	25.9
Hay	____	33.3	46.4	26.6
Tillable pasture	____	61.3	60.2	57.0
Crop yields--Corn, bu. per acre	____	12.4	30.2	14.5
Oats, bu. per acre	____	10.9	11.1	8.4
Wheat, bu. per acre	____	25.9	29.5	21.2
Soybeans, bu. per acre	____	18.3	27.2	13.1
Value of feed fed to productive L.S.	____	2 180	2 212	2 308
Returns per $100 of feed fed to productive livestock	____	136	152	124
Returns per $100 invested in:				
Cattle	____	68	122	91
Poultry	____	223	246	237
Pigs weaned per litter	____	5.5	6.5	6.0
Income per litter farrowed	____	74	85	75
Dairy sales per dairy cow	____	43	66	24
Investment in productive L.S. per A.	____	6.64	5.82	7.44
Receipts from productive L.S. per A.	____	10.75	12.33	10.74
Man labor cost per crop acre	____	4.86	4.93	5.06
Machinery cost per crop acre	____	1.93	1.84	2.28
Power and mach. cost per crop A.	____	3.27	3.42	3.62
Farms with tractor	____	61%	70%	50%
Value of feed fed to horses	____	315	335	277
Man labor cost per $100 gross income	____	22	17	33
Expenses per $100 gross income	____	51	40	87
Farm improvements cost per acre	____	1.08	1.19	1.03
Excess of sales over cash expenses	____	2 299	2 850	1 375
Increase in inventory	____	386	1 120	-297
Rate earned on investment	____	5.05%	8.65%	1.04%
Gross receipts per farm	____	4 253	5 669	2 947

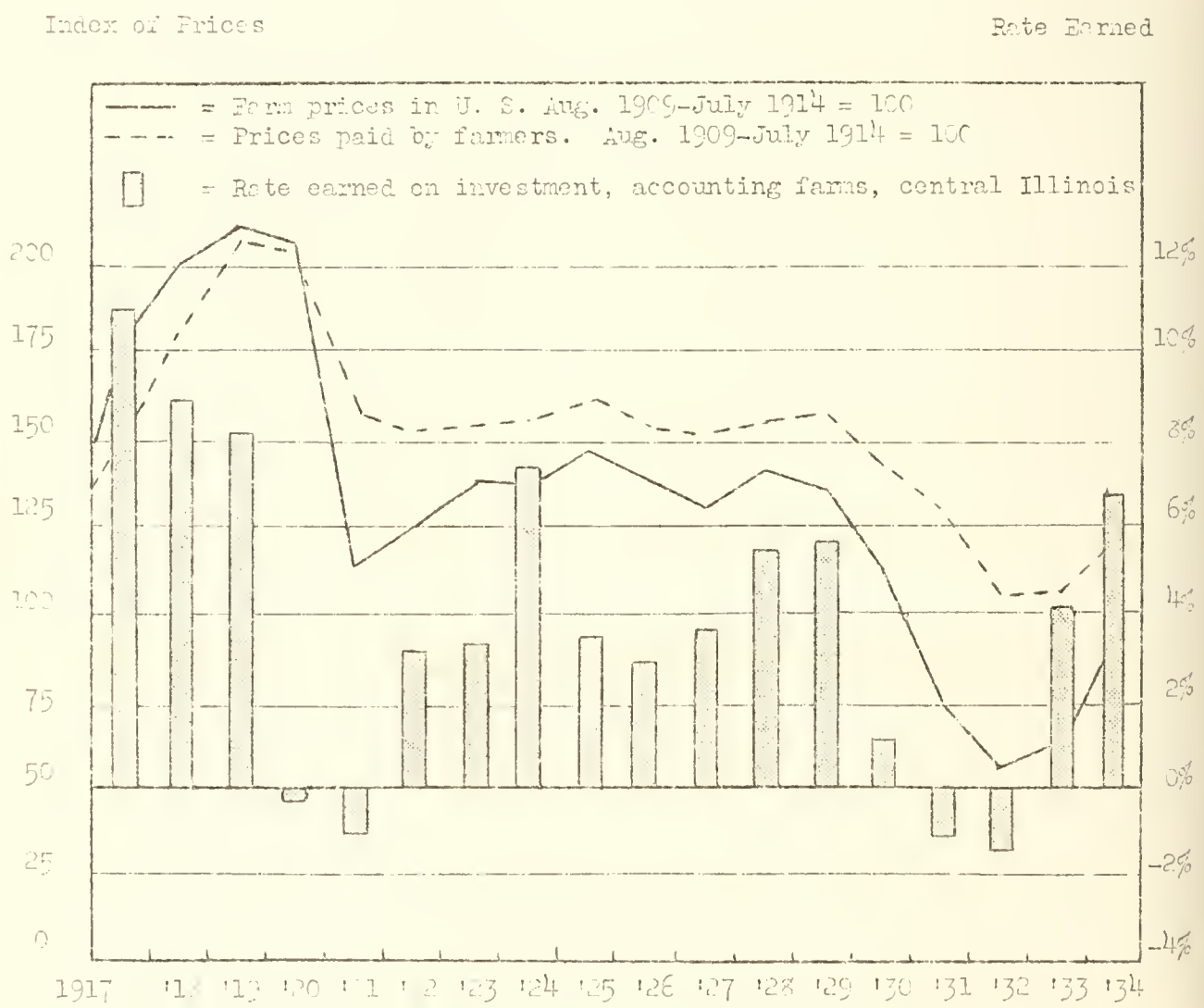
Chart for Studying the Efficiency of Various Parts of Your Business, Sangamon County, 1934

The numbers above the lines across the middle of the page are the averages for the 31 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
12.5	37	31	41	149	83	373	236	--	.27	--	3386	6300	35	9300	276
11.0	32	27	38	134	75	343	216	.86	.87	--	2786	5500	31	8300	516
9.5	27	23	35	119	67	313	196	1.86	1.47	4	2186	4700	27	7300	456
8.0	22	19	32	104	59	283	176	2.86	2.07	10	1536	3900	23	6300	396
6.5	17	15	29	89	51	253	156	3.86	2.67	16	986	3100	19	5300	336
5.05	12.4	10.9	25.9	74	43	223	136	4.86	3.27	22	386	2299	15.44	4253	275.5
3.5	7	7	23	59	35	193	116	5.86	3.87	28	-211	1500	11	3300	216
2.0	2	3	20	44	27	163	96	6.86	4.47	34	-811	700	7	2300	156
.5	--	--	17	29	19	133	76	7.86	5.07	40	-1411	--	3	1300	96
-1.0	--	--	14	14	11	103	56	8.86	5.67	46	-2011	--	--	300	36
-2.5	--	--	11	--	3	73	36	9.86	6.27	52	-2611	--	--	--	--

Influence of Price Changes on Farm Earnings

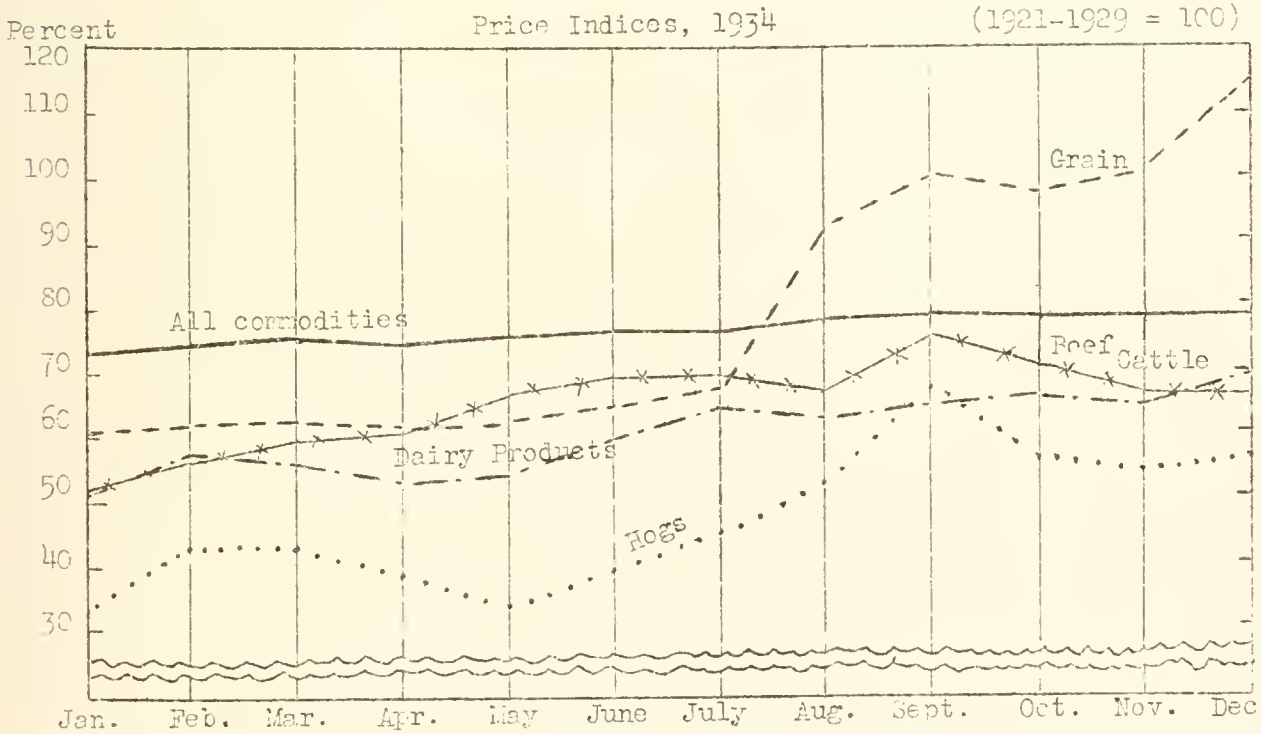
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Sangamon County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year since 1930, and were 69 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five. Thus profits were the best the county had experienced since 1929.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Sangamon County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	36	34	32	30	31
Average size of farms, acres	266	268	253	243	276
Average rate earned, to pay for management, risk and capital	1.9%	-1.7%	-1.3%	3.7%	5.0%
Average labor and management wage	$-962	$-2 711	$-2 085	$ 17	$508
Gross income per acre	16.40	7.58	6.58	14.13	15.44
Operating cost per acre	12.49	10.71	8.74	8.39	7.93
Average value of land per acre	154	141	127	124	114
Total investment per acre	203	182	163	156	149
Investment per farm in:					
Total livestock	3 542	2 834	2 413	1 904	2 281
Cattle	1 520	1 272	1 112	900	1 166
Hogs	1 079	816	632	419	455
Poultry	125	114	92	75	60
Gross income per farm	4 360	2 031	1 666	3 429	4 253
Income per farm from:					
Crops	723	---	---	1 433	1 160
Miscellaneous income	95	39	38	41	--
Total livestock	3 542	1 942	1 628	1 955	3 017
Cattle	645	342	422	468	954
Dairy sales	365	357	335	229	184
Hogs	2 260	1 103	739	1 093	1 573
Poultry	204	127	109	119	60
Average yield of corn in bu.	34	43	58	34	12
Average yield of wheat in bu.	23	27	20	20	26

ANNUAL FARM BUSINESS REPORT ON FIFTY-SEVEN FARMS IN MORGAN, SCOTT, AND GREENE COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. E. Wills, and E. L. Sauer*

Farm earnings on the 57 accounting farms in Morgan, Scott, and Greene Counties averaged 4.68 percent for 1934. This is the second highest return during the past five years, 1933 having the highest with an average return of 4.9 percent. The 1934 return is remarkable considering the severe drouth and chinch bug damage.

These 57 accounts show for 1934 an average net income of $1551 per farm, as compared with an average of $1,394 in 1933, and an average net loss of $524 in 1932. The average cash income in 1934 was $4,824 per farm, the cash business expenditures $2,528 per farm, leaving a cash balance of $2,296 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) The low yields were directly responsible for the decrease in inventory of $53 a farm. This decrease, deducted from the cash balance, resulted in an average excess of receipts over expenses of $2,243 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* I. E. Parett, J. L. Iftner, and G. E. Hunt, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans was much better compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 57 accounting farms the most successful third shows an average net income of $3,400, while the average net income of the least successful third of the farms was only $44. In 1933 the comparable net incomes for the two groups was $2,503 and $37 respectively.

Investments, Receipts, Expenses and Earnings on 57 Morgan, Scott, and Greene County Farms in 1934

Items	Your farm	Average of 57 farms	19 most profitable farms	19 least profitable farms
CAPITAL INVESTMENTS				
Land		24 736	31 184	19 039
Farm improvements		3 602	3 885	3 176
Livestock total		1 797	2 335	1 475
Horses		440	574	347
Cattle		858	1 218	691
Hogs		390	467	302
Sheep		38	15	59
Poultry		71	61	76
Machinery and equipment		1 306	1 496	976
Feed and grains		1 697	2 233	1 178
Total capital investment	$	$33 138	$41 133	$25 844
RECEIPTS AND NET INCREASES				
Livestock total		2 472	3 542	1 786
Horses		30	76	13
Cattle		696	1 467	311
Hogs (including AAA payments)		1 335	1 652	1 055
Sheep		54	34	56
Poultry		48	65	41
Egg sales		70	87	53
Dairy sales		239	161	257
Feed and grains (including AAA payments)		1 044	2 269	---
Labor off farm		61	57	27
Miscellaneous receipts		9	2	3
Total receipts & net increases	$	$ 3 586	$ 5 870	$ 1 816
EXPENSES AND NET DECREASES				
Farm improvements		184	207	169
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		374	489	268
Feed and grains		---	---	50
Livestock expense		32	36	21
Crop expense		183	289	108
Hired labor		259	378	148
Taxes		284	332	258
Miscellaneous expenses		27	32	27
Total expenses & net decreases	$	$ 1 343	$ 1 763	$ 1 049
RECEIPTS LESS EXPENSES	$	$ 2 243	$ 4 107	$ 767
Total unpaid labor		692	707	723
Operator's labor		512	511	515
Family labor		180	196	208
Net income from investment and management		1 551	3 400	44
RATE EARNED ON INVESTMENT	%	4.68%	8.26%	0.17%
Return to capital and operator's labor and management		2 063	3 911	559
5% of capital invested		1 657	2 057	1 292
LABOR AND MANAGEMENT WAGE	$	$ 406	$ 1 854	$ -733

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15 and over	3	$3	11
13	4	1	7
11	1	-1	2
9	4	-3	4
7	6	-5	1
5	14		

A further study of the farm businesses made by comparing the investments, receipts and expenses of the group of farms with the highest net income, with those having the lowest net income, should throw some light on the the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 330 acres each, the least successful 227 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of grains, cattle, and hogs accounts for much of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance. Owing to the extremely poor yields in Morgan, Scott, and Greene Counties, the value of grain at the end of the year was not as much as at the beginning, even though prices of grain had more than doubled. This condition was aggravated by the fact that these counties have considerable livestock and, with very little feed produced, farmers were compelled to buy grain at a high price while livestock prices remained still relatively low.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 509	637
Average of 19 most successful farms	3 049	1 287
Average of 19 least successful farms	1 951	136
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. This is one of the major factors in accounting for their higher returns from feed and grains.

The decrease in inventory for the 57 accounting farms in Morgan, Scott, and Greene Counties averaged $53 in 1934. The 1933 inventory values increased $507 per farm, while in 1932 there was an inventory decrease of $902 per farm. The decreases in 1934 were: feed and grain $46, machinery $11, and improvements $50, while livestock showed an increase of $54. The decrease in machinery was the smallest on account-keeping farms since 1929, and indicates that needed repairs and replacements are being made, but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 797	$1 851	$ 54	$
Feed and grains	1 697	1 651	-46	
Machinery	1 306	1 295	-11	
Improvements (except residence)	3 602	3 552	-50	
Total	$8 402	$8 349	$-53	$

Some Adjustments on Morgan, Scott, and Greene County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 52 cents an acre higher in 1934 than in 1933, while cash operating expenses were $2,528 a farm in 1934, as compared with $1,628 in 1933. Due to the drouth and the resultant very low crop yields, it was necessary for the farms in this study to purchase $453 more feed than in 1933. There was also a noticeable increase in expenditure over the previous year for livestock, machinery, improvements, and crop expenses, while a decrease occurred in expenditure for taxes. If this area has more favorable weather and crop conditions in 1935, so as to increase their farm income, indications point to an increase of spending for repairs and replacement of machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Morgan, Scott, and Greene Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 439	$ 619	$	$2 857	$3 598
Feed and grains		683	663		1 773	1 250
Machinery		473	541		110	52
Improvements		148	189		14	2
Labor		259	453		61	53
Miscellaneous		27	28		9	28
Livestock expense		32	35		---	---
Crop expense		183	195		---	---
Taxes		284	310		---	---
Total	$	$2 528	$3 033	$	$4 824	$4 983
Excess of cash sales over expenses				$	$2 296	"1 950
Increase in inventory					-53	520
Income to labor and capital (Receipts less expenses)					2 243	2 470

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 97 percent of that in 1929, cash expenditures were only 83 percent as large. In 1934 livestock purchases were 71 percent, and feed and grain purchases 103 percent as large as in 1929. In 1934 these farms paid out 87 percent as much for machinery, and 94 percent as much for crop expense as in 1929, while taxes were reduced to 92 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $10.32, as compared with $0.19 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms in this study averaged 134.9 more tillable acres than the least profitable farms. They had 39.4 acres more corn, 4.4 acres more oats, 45.4 acres more wheat, 15.9 acres more soybeans, 7.1 acres more hay than the least profitable farms. The larger acreage of wheat, soybeans, and hay together with the higher yielding crops in 1934, was an important factor in accounting for the higher returns from feed and grains on the most profitable farms. The most profitable farms carried larger inventories of feed and grains, on which to make a profit when prices advanced. The most profitable farms obtained higher crop yields, producing 12.7 bushels more corn, 9.4 bushels more oats, 11.0 bushels more wheat, and 1.1 bushels more soybeans per acre than the least profitable farms. Crop yields were so low on the least profitable farms that there was an average inventory loss of $750 per farm in spite of the price advance.

The most profitable farms were more intensive, and more efficient in their livestock production than the least profitable farms. They had an investment in proudctive livestock of $5.72 per acre, and fed $3,044 of feed per farm, as compared with $4.52 invested per acre, and $1,751 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $114 for each $100 of feed fed, as compared with a return of $101 for each $100 of feed fed on the least profitable farms. The most profitable farms had an income of $87 per litter farrowed, as compared with $71 on the least profitable farms. There were returns of $134 for each $100 invested in cattle on the most profitable farms, as compared with returns of $89 per $100 invested in cattle on the low profit group.

The larger income on the most profitable farms was secured with a total operating cost of $7.49 per acre, as compared with $7.81 per acre for the least profitable farms. The man labor cost per crop acre on the most profitable farms was $4.27, as compared with $7.14 per crop acre on the least profitable farms, while the power and machinery cost per crop acre was $2.99 on the most profitable farms, and $4.05 per crop acre for the low-profit group.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	19	$167	13	$264	17	$239	$562
1/3 least profitable farms	18	106	6	260	17	166	331
All accounting farms	56	132	32	253	52	204	458

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash secured from benefit payments will more than pay for the year's taxes. As an average of all accounting farms in this study, the payments actually received were $174 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 26.6 contracted acres which were used as follows: 4.5 idle; 3.3 red clover; 8.7 sweet clover; 3.7 soybeans; 0.6 alfalfa and 5.8 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 57 Morgan, Scott, and Green County Farms in 1934

Items	Your farm	Average of 57 farms	19 most profitable farms	19 least profitable farms
Size of farms--acres		275.7	329.6	227.0
Percent of land area tillable		81.0	89.3	70.2
Percent of tillable land in hay and pasture		23.7	22.0	26.7
Gross receipts per acre		13.01	17.81	8.00
Total expenses per acre		7.38	7.49	7.81
Net receipts per acre		5.63	10.32	.19
Value of land per acre		90	95	84
Total investment per acre		120	125	114
Acres in Corn		68.1	88.9	49.5
Oats		19.7	21.0	16.6
Wheat		42.8	64.2	18.8
Soybeans		9.8	20.6	4.7
Hay		26.2	30.0	22.9
Tillable pasture		46.1	53.4	41.1
Crop yields--Corn, bu. per acre		11.7	17.7	5.0
Oats, bu. per acre		18.7	19.2	9.8
Wheat, bu. per acre		25.0	29.3	18.3
Soybeans, bu. per acre		15.3	15.8	14.7
Value of feed fed to productive L.S.		2 274	3 044	1 751
Returns per $100 of feed fed to productive livestock		107	114	101
Returns per $100 invested in:				
Cattle		114	134	89
Poultry		171	227	138
Pigs weaned per litter		5.7	5.6	5.9
Income per litter farrowed		79	87	71
Dairy sales per dairy cow		50	45	48
Investment in productive L.S. per A.		4.94	5.72	4.52
Receipts from productive L.S. per A.		8.86	10.52	7.81
Man labor cost per crop acre		5.21	4.27	7.14
Machinery cost per crop acre		2.11	2.03	2.27
Power and mach. cost per crop A.		3.44	2.99	4.05
Farms with tractor		73.6%	95%	52.6%
Value of feed fed to horses		265	306	224
Man labor cost per $100 gross income		26	18	46
Expenses per $100 gross income		57	42	98
Farm improvements cost per acre		.67	.63	.74
Excess of sales over cash expenses		2 296	3 151	1 517
Increase in inventory		-53	956	-750
Rate earned on investment		4.68%	8.26%	0.17%
Gross receipts per farm		3 586	5 870	1 816

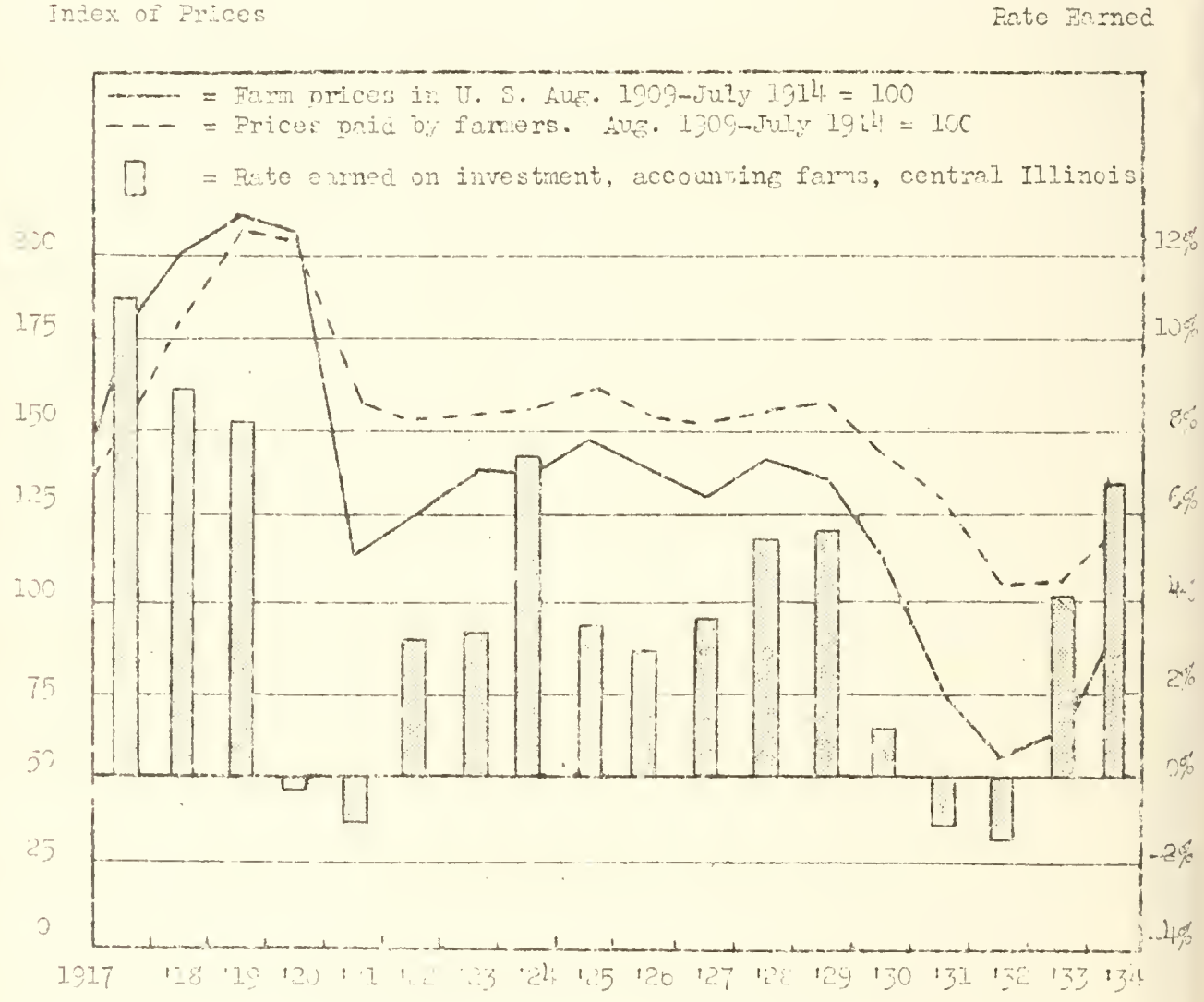
Chart for Studying the Efficiency of Various Parts of Your Business,
Morgan, Scott, and Greene Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 57 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
14.68	27	34	35	154	100	371	157	--	--	--	2950	4800	23	7100	525
12.68	24	31	33	139	90	331	147	.25	--	--	2350	4300	21	6400	475
10.68	21	28	31	124	80	291	137	1.50	.44	5	1750	3800	19	5700	425
8.68	18	25	29	109	70	251	127	2.75	1.44	12	1150	3300	17	5000	375
6.68	15	22	27	94	60	211	117	4.00	2.44	19	550	2800	15	4300	325
4.68	11.7	18.7	25.0	79	50	171	107	5.21	3.44	26	-53	2296	13.01	3586	276
2.68	9	16	23	64	40	131	97	6.50	4.44	33	-650	1800	11	2900	225
.68	6	13	21	49	30	91	87	7.75	5.44	40	-1250	1300	9	2200	175
-1.32	3	10	19	34	20	51	77	9.00	6.44	47	-1850	800	7	1500	125
-3.32	0	7	17	19	10	11	67	10.25	7.44	54	-2450	300	5	800	75
-5.32	--	4	15	4	0	--	57	11.50	8.44	61	-3050	-200	3	100	25

Influence of Price Changes on Farm Earnings

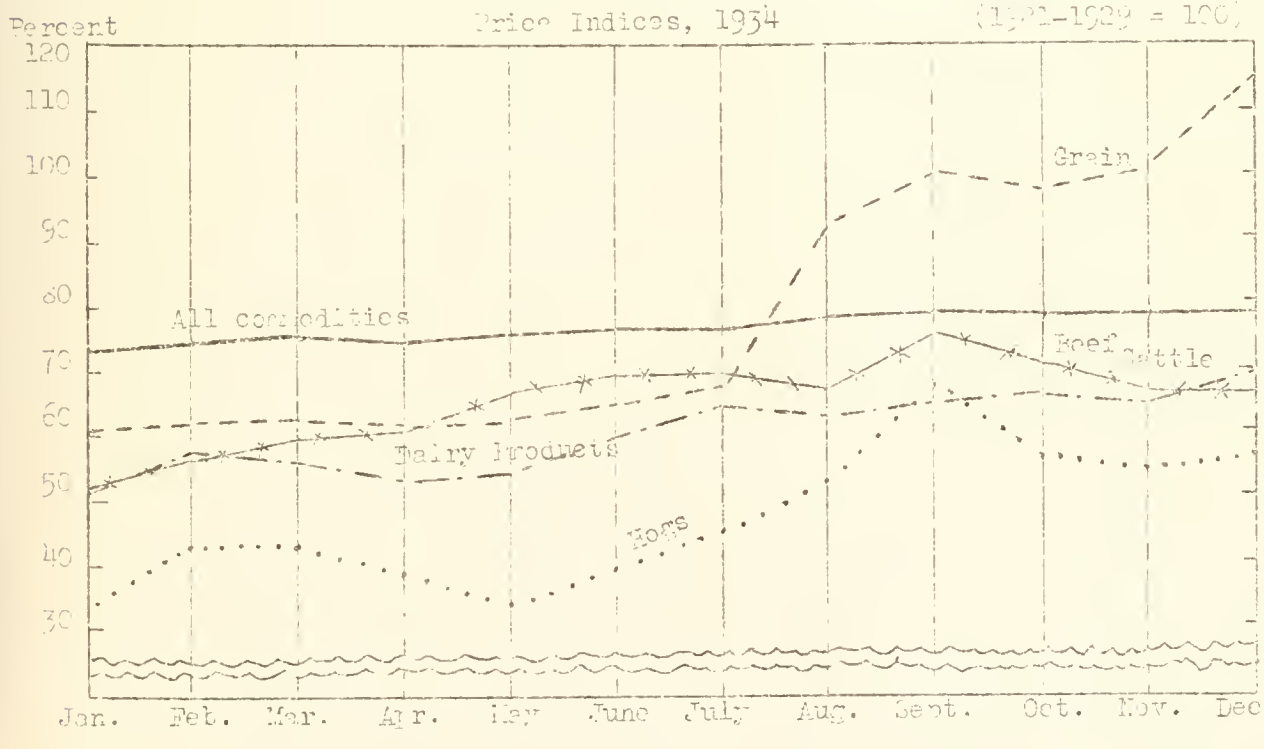
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 68 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.10 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Morgan, Scott, and Greene Counties for the last five years is very interesting because of the violent fluctuations in the price level. Although the 1934 crop was nearly a failure, and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Morgan, Scott, and Greene Counties for 1930-1934

Items	1930 1/	1931 1/	1932 1/	1933 1/	1934
Number of farms	30	30	32	30	57
Average size of farms, acres	232	253	277	268	276
Average rate earned, to pay for management, risk and capital	2.7%	-1.3%	-2.0%	4.9%	4.7%
Average labor and management wage	$-70	$-1 441	$-1 330	$ 497	$ 406
Gross income per acre	14.91	7.25	5.28	12.06	13.01
Operating cost per acre	11.15	8.91	7.17	6.86	7.38
Average value of land per acre	100	95	70	80	90
Total investment per acre	140	128	97	106	120
Investment per farm in:					
Total livestock	2 710	2 305	1 940	1 736	1 797
Cattle	1 172	939	865	775	858
Hogs	852	775	522	451	390
Poultry	164	135	108	87	71
Gross income per farm	3 461	1 834	1 460	3 233	3 586
Income per farm from:					
Crops	311	334	235	1 633	1 044
Miscellaneous income	108	64	70	54	9
Total livestock	3 042	1 436	1 155	1 546	2 472
Cattle	412	240	248	254	696
Dairy sales	136	79	92	122	239
Hogs	2 198	947	693	1 022	1 335
Poultry	262	158	99	95	48
Average yield of corn in bu.	38	50	56	47	12
Average yield of wheat in bu.	21	25	18	19	25

1/ Records from Scott County only included for 1903-1933.

ANNUAL FARM BUSINESS REPORT ON FIFTY-ONE FARMS IN MASON, CASS, AND MENARD COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and A. L. Leonard*

The farm earnings of 51 account-keeping farmers in Mason, Cass, and Menard Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 51 accounts show for 1934 an average net income of $1,526 per farm, as compared with an average of $1,374 in 1933, and an average net loss of $641 in 1932. The average cash income in 1934 was $3,751 per farm, the cash business expenditures $1,652 per farm, leaving a cash balance of $2,099 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income there was an inventory increase of $99 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $2,198 per farm. The inventory increase was a much smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others, and was much worse on some farms than other farms in the same community. Conditions affecting crop yields were very spotted This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* C. S. Love, G. H. Husted, and L. W. Chalcraft, farm advisors in above counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.5 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand, the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 51 accounting farms the most successful one-third shows an average net income of $2,569, while the average net income of the least successful one-third of the farms was only $841. In 1933 the comparable net incomes for the two groups was $2,398, and $319 respectively.

Investments, Receipts, Expenses and Earnings on
Mason, Cass, and Menard County Farms in 1934

Items	Your farm	Average of 51 farms	17 most profitable farms	17 least profitable farms
CAPITAL INVESTMENTS				
Land		21 855	23 796	23 115
Farm improvements		3 071	3 243	3 331
Livestock total		1 340	1 750	1 168
Horses		494	563	519
Cattle		529	819	368
Hogs		235	274	215
Sheep		18	23	10
Poultry		64	71	56
Machinery and equipment		1 055	1 347	948
Feed and grains		1 727	2 260	1 342
Total capital investment	$	$29 048	$32 396	$29 904
RECEIPTS AND NET INCREASES				
Livestock total		1 476	1 875	1 123
Horses		41	44	34
Cattle		232	330	148
Hogs (including AAA payments)		794	974	592
Sheep		20	24	12
Poultry		61	57	79
Egg sales		105	111	71
Dairy sales		223	335	187
Feed and grains (including AAA payments)		1 812	2 686	1 569
Labor off farm		74	104	42
Miscellaneous receipts		7	---	15
Total receipts & net increases	$	$ 3 369	$ 4 665	$ 2 749
EXPENSES AND NET DECREASES				
Farm improvements		166	171	219
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		302	386	277
Feed and grains		---	---	---
Livestock expense		36	32	51
Crop expense		154	203	148
Hired labor		191	262	196
Taxes		292	357	277
Miscellaneous expenses		30	37	29
Total expenses & net decreases	$	$ 1 171	$ 1 448	$ 1 197
RECEIPTS LESS EXPENSES	$	$ 2 198	$ 3 217	$ 1 552
Total unpaid labor		672	648	711
Operator's labor		536	527	540
Family labor		136	121	171
Net income from investment and management		1 526	2 569	841
RATE EARNED ON INVESTMENT	%	5.25%	7.93%	2.81%
Return to capital and operator's labor and management		2 062	3 096	1 381
5% of capital invested		1 452	1 620	1 495
LABOR AND MANAGEMENT WAGE	$	$ 610	$ 1 476	$ -114

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$11	4	$3	13
9	11	1	4
7	8	-1	1
5	10		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 297 acres each, the least successful 269 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Differences in receipts from the sale of grains, hogs, cattle, and dairy products account for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 609	1 095
Average of 17 most successful farms	3 529	1 502
Average of 17 least successful farms	1 830	836
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. This was a major factor in accounting for their higher returns from feed and grains.

The average inventory increase for the accounting farms included in this study was $99 in 1934, as compared with $780 in 1933, and an inventory loss of $776 a farm in 1932. There were increases of $52 in total livestock, $132 in feed and grains, and $12 in machinery, while improvements showed a decrease of $97. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 340	$1 392	$ 52	$
Feed and grains	1 727	1 859	132	
Machinery	1 055	1 067	12	
Improvements (except residence)	3 071	2 974	-97	
Total	$7 193	$7 292	$ 99	$

Some Adjustments on Mason, Cass, and Menard County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 22 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,652 a farm in 1934, as compared with $1,320 in 1933. The largest increase in expenditures over the previous year was for machinery and repairs for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting
Farms in Mason, Cass, and Menard Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 210	$ 979	$	$1 634	$4 303
Feed and grains		252	854		1 932	2 045
Machinery		415	706		101	123
Improvements		72	292		3	3
Labor		191	394		74	41
Miscellaneous		30	29		7	18
Livestock expense		36	58		---	---
Crop expense		154	218		---	---
Taxes		292	393		---	---
Total	$	$1 652	$3 923	$	$3 751	$6 533
Excess of cash sales over expenses				$	$2 099	$2 610
Increase in inventory					99	711
Income to labor and capital (Receipts less expenses)					2 198	3 321

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 57 percent of that in 1929, cash expenditures were only 42 percent as large. In 1934, livestock purchases were 21 percent, and feed and grain purchases 30 percent as large as in 1929. In 1934 these farms paid out 59 percent as much for machinery, and 71 percent as much for crop expense as in 1929, while taxes were reduced to 74 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $8.64, as compared with $3.13 for the least profitable farms. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms in this study averaged 28.3 acres larger, and had 5 acres more corn, 5.2 acres more oats, 11.9 acres more wheat, 16.3 acres more soybeans, and 6.1 acres more hay than the least profitable farms. Wheat and soybeans were the high-yielding crops in 1934. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. In addition to the larger acreage of crops, a reason for the larger inventories was the higher crop yields, there being an advantage of 2.3 bushels of corn, 5.5 bushels of oats, 4.5 bushels of wheat, and 7.9 bushels of soybeans in favor of the high-profit group.

The most profitable farms were more intensive, and more efficient in their livestock production than the least profitable farms. The most profitable farms had an investment in productive livestock of $3.82 per acre, and fed $1,658 of feed per farm, as compared with $2.50 invested per acre, and $1,098 of feed fed per farm, on the least profitable farms. The productive livestock, on the most profitable farms, returned $110 for each $100 of feed fed, as compared with a return of $100 for each $100 of feed fed on the least profitable farms. The income per litter farrowed was $120 on the most profitable farms, as compared with $74 on the least profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $7.05 per acre, as compared with $7.10 an acre on the least profitable farms. Man labor costs per crop acre were $3.33 on the most profitable farms, as compared with $4.75 on the least profitable farms, while power and machinery costs per crop acre amounted to $2.65 on the most profitable farms, and $2.74 on the least profitable farms.

The Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	17	$152	13	$249	17	$155	$498
1/3 least profitable farms	16	123	14	191	15	117	377
All accounting farms	50	134	37	200	49	138	409

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay the year's taxes. As an average for all accounting farms, the payments actually received were $117 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 25.9 contracted acres which were used as follows: 6.8 idle; 2.1 red clover; 5.0 sweet clover; 9.7 soybeans; 0.8 alfalfa; and 1.5 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 51 Mason, Cass, and Menard County Farms in 1934

Items	Your farm	Average of 51 farms	17 most profitable farms	17 least profitable farms
Size of farms--acres		262.8	297.3	268.8
Percent of land area tillable		86.3	90.6	84.1
Percent of tillable land in hay and pasture		31.1	29.2	31.6
Gross receipts per acre		12.82	15.69	10.23
Total expenses per acre		7.01	7.05	7.10
Net receipts per acre		5.81	8.64	3.13
Value of land per acre		83	80	86
Total investment per acre		111	109	111
Acres in Corn		63.1	72.8	67.3
Oats		24.1	27.9	22.7
Wheat		46.0	57.5	45.6
Soybeans		9.0	13.4	2.1
Hay		27.2	33.9	27.8
Tillable pasture		43.4	45.0	44.1
Crop yields--Corn, bu. per acre		21.2	22.3	19.5
Oats, bu. per acre		9.9	12.3	6.8
Wheat, bu. per acre		17.1	19.7	15.2
Soybeans, bu. per acre		17.2	18.0	10.7
Value of feed fed to productive L.S.		1 322	1 658	1 098
Returns per $100 of feed fed to productive livestock		109	110	100
Returns per $100 invested in:				
Cattle		86	86	84
Poultry		259	233	268
Pigs weaned per litter		5.8	5.9	5.8
Income per litter farrowed		93	120	74
Dairy sales per dairy cow		43	54	43
Investment in productive L.S. per A.		3.25	3.82	2.50
Receipts from productive L.S. per A.		5.46	6.16	4.05
Man labor cost per crop acre		4.46	3.83	4.75
Machinery cost per crop acre		1.65	1.72	1.52
Power and mach. cost per crop A.		2.75	2.65	2.74
Farms with tractor		55%	71%	41%
Value of feed fed to horses		243	252	255
Man labor cost per $100 gross income		24	18	31
Expenses per $100 gross income		55	45	69
Farm improvements cost per acre		.63	.58	.31
Excess of sales over cash expenses		2 099	3 004	1 373
Increase in inventory		39	213	179
Rate earned on investment		5.25%	7.93%	2.81%
Gross receipts per farm		3 369	4 665	2 749

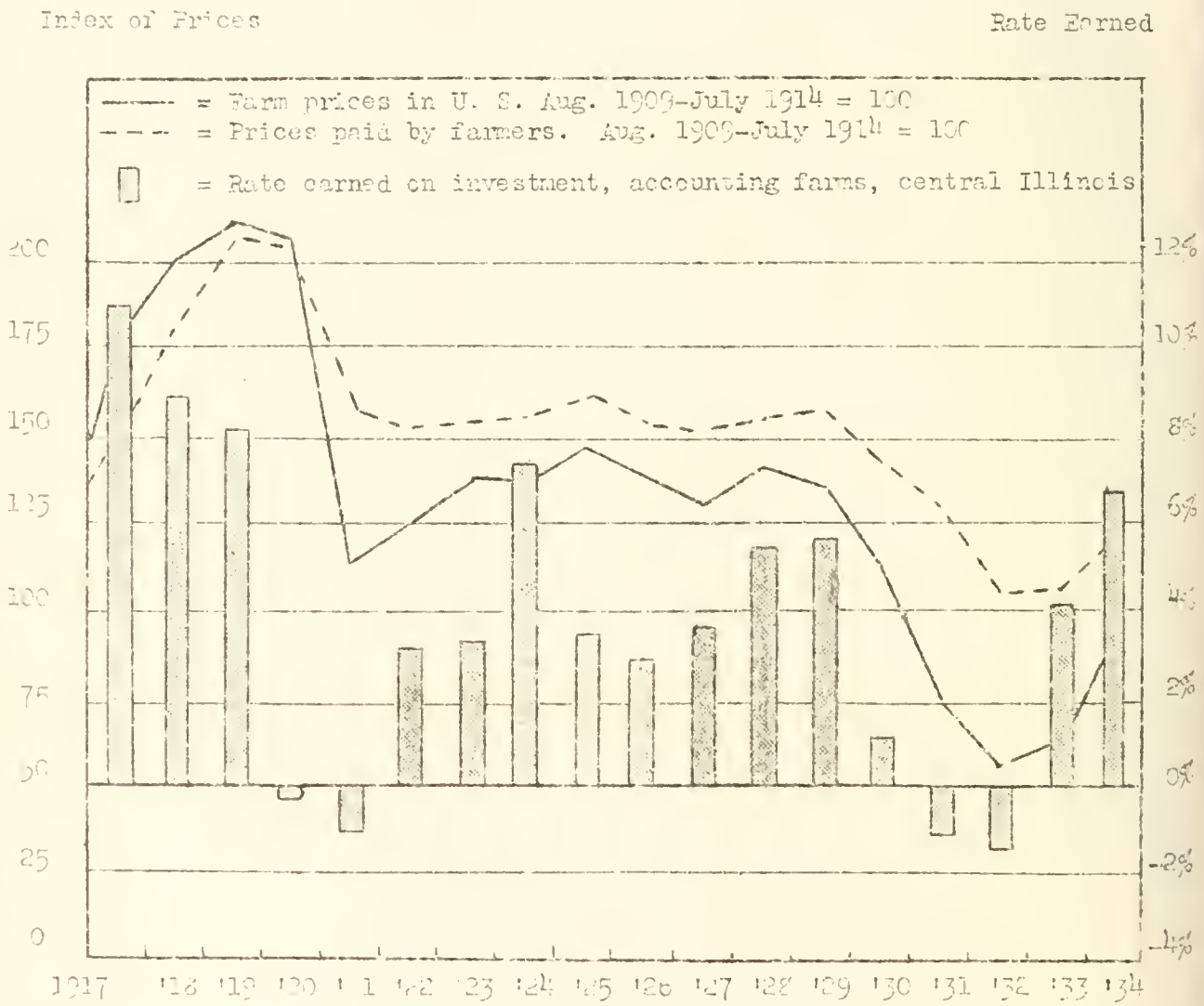
Chart for Studying the Efficiency of Various Parts of Your Business, Mason, Cass, and Menard Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 51 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
10.25	36	20	32	143	78	460	185	.75	--	--	3100	5600	23	6900	460
9.25	33	18	29	133	71	420	170	1.50	.35	0	2500	4900	21	6200	420
8.25	30	16	26	123	64	380	155	2.25	.95	6	1900	4200	19	5500	380
7.25	27	14	23	113	57	340	140	3.00	1.55	12	1300	3500	17	4800	340
6.25	24	12	20	103	50	300	125	3.75	2.15	18	700	2800	15	4100	300
5.25	21.2	9.9	17.1	93	43	259	109	4.46	2.75	24	99	2099	12.82	3369	262.8
4.25	18	8	14	83	36	220	95	5.25	3.35	30	-500	1400	11	2700	220
3.25	15	6	11	73	29	180	80	6.00	3.95	36	-1100	700	9	2000	180
2.25	12	4	8	63	22	140	65	6.75	4.55	42	-1700	0	7	1300	140
1.25	9	2	5	53	15	100	50	8.50	5.15	48	-2300	-700	5	600	100
.25	6	0	2	43	8	60	35	9.25	5.75	54	-2900	-1400	3	--	60

Influence of Price Changes on Farm Earnings

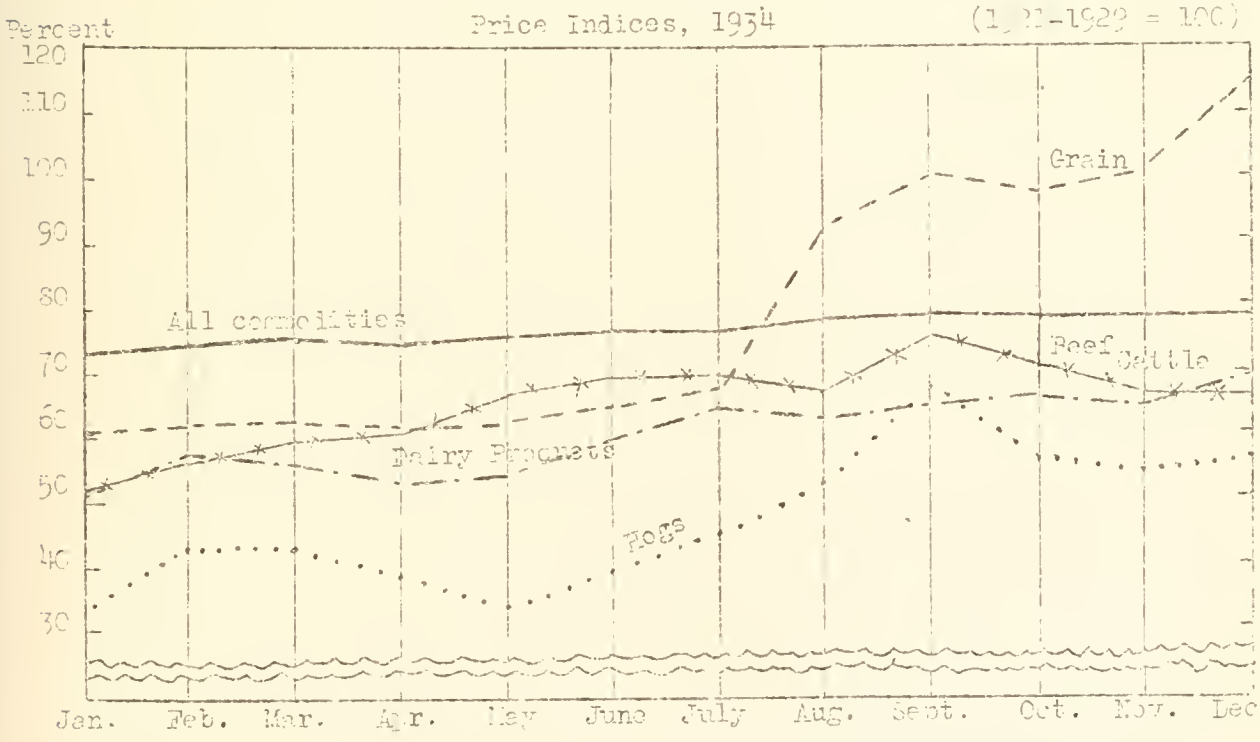
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 89 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale prices of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in this area for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last four, and were 66 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1929.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Mason, Cass, and Menard Counties for 1930-1934

Items	1930 1/	1931 2/	1932	1933 3/	1934
Number of farms	52	43	33	47	51
Average size of farms, acres	244	213	236	252	263
Average rate earned, to pay for management, risk and capital	2.0%	-2.1%	-2.3%	5.1%	5.2%
Average labor and management wage	$-446	$-1 544	$-1 678	$535	$610
Gross income per acre	16.21	9.43	5.45	12.24	12.82
Operating cost per acre	13.13	12.34	8.15	6.79	7.01
Average value of land per acre	105	93	99	82	83
Total investment per acre	193	137	133	108	111
Investment per farm in:					
Total livestock	3 804	2 870	1 762	1 496	1 340
Cattle	1 942	1 363	782	667	529
Hogs	1 044	845	393	328	235
Poultry	153	120	114	80	64
Gross income per farm	3 947	2 056	1 279	3 067	3 369
Income per farm from:					
Crops	---	---	55	1 559	1 312
Miscellaneous income	64	47	38	36	7
Total livestock	3 383	2 009	1 186	1 492	1 476
Cattle	680	415	278	263	232
Dairy calves	302	211	228	161	223
Hogs	2 654	1 211	520	992	794
Poultry	218	152	144	29	61
Average yield of corn in bu.	33	42	53	42	21
Average yield of wheat in bu.	12	24	17	17	17

1/ Records from Pike, Brown, Menard and Cass Counties included for 1930.
2/ Records from Pike, Cass, and Brown Counties included for 1931.
3/ Records from Cass, Mason, Pike, and Brown Counties included for 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-TWO FARMS IN PIKE AND BROWN COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and A. L. Leonard*

Farm earnings on the 32 accounting farms in Pike and Brown Counties averaged 3.01 percent for 1934. This is the second highest return during the past five years, 1933 having the highest with an average return of 5.1 percent. The 1934 return is remarkable considering the severe drouth and chinch bug damage.

These 32 accounts show for 1934 an average net income of $769 per farm, as compared with an average of $1,374 in 1933, and an average net loss of $641 in 1932. The average cash income in 1934 was $3,676 per farm, the cash business expenditures $1,917 per farm, leaving a cash balance of $1,759 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) The low yields were directly responsible for the decrease in inventory of $307 a farm. This decrease, deducted from the cash balance, resulted in an average excess of receipts over expenses of $1,452 a farm.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* W. B. Bunn and W. E. Foard, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group has a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans was much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 32 accounting farms the most successful third shows an average net income of $2,365, while the least successful third had an average net loss of $449. In 1933 the most successful third had an average net income of $2,398, and the least successful third had an average net income of $319.

Investments, Receipts, Expenses and Earnings on 32 Pike and Brown County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
CAPITAL INVESTMENTS				
Land		17 604	25 385	11 363
Farm improvements		3 434	4 601	2 503
Livestock total		2 067	3 350	1 390
Horses		348	434	355
Cattle		1 144	2 147	625
Hogs		461	650	276
Sheep		69	70	86
Poultry		45	49	48
Machinery and equipment		979	1 333	754
Feed and grains		1 431	2 260	722
Total capital investment	$	$25 515	$36 949	$16 732
RECEIPTS AND NET INCREASES				
Livestock total		2 886	5 043	1 368
Horses		36	64	23
Cattle		849	1 382	217
Hogs (including AAA payments)		1 738	2 833	848
Sheep		90	107	80
Poultry		32	15	41
Egg sales		45	31	53
Dairy sales		96	111	106
Feed and grains (including AAA payments)		---	---	---
Labor off farm		58	80	22
Miscellaneous receipts		5	15	2
Total receipts & net increases	$	$ 2 949	$ 5 138	$ 1 392
EXPENSES AND NET DECREASES				
Farm improvements		199	308	126
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		246	387	132
Feed and grains		502	506	507
Livestock expense		45	68	30
Crop expense		130	206	84
Hired labor		151	313	41
Taxes		194	303	128
Miscellaneous expenses		30	35	25
Total expenses & net decreases	$	$ 1 497	$ 2 126	$ 1 073
RECEIPTS LESS EXPENSES	$	$ 1 452	$ 3 012	$ 319
Total unpaid labor		683	647	768
Operator's labor		515	524	528
Family labor		168	123	240
Net income from investment and management		769	2 365	-449
RATE EARNED ON INVESTMENT	%	3.01%	6.40%	-2.68%
Return to capital and operator's labor and management		1 284	2 889	79
5% of capital invested		1 276	1 847	837
LABOR AND MANAGEMENT WAGE	$	$ 8	$ 1 042	$ -758

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$13	1	$1	5
11	2	-1	7
9	1	-3	3
7	1	-5	0
5	6	-7 and under	2
3	4		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net income, with those having the lowest net income should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms averaged 339 acres each, the least successful 204 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of hogs and cattle accounts for most of the difference in income between the two groups. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance. Owing to the extremely poor yields in Pike and Brown Counties the value of grain at the end of the year was not as much as at the beginning, even though prices of grain had more than doubled. This condition was aggravated by the fact that these counties had considerable livestock and, with very little feed produced, farmers were compelled to buy grain at a high price while livestock prices were still relatively low.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms	2 250	425
Average of 11 most successful farms	3 699	908
Average of 11 least successful farms	1 032	106
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year. With the rise in corn prices, this was one of the important factors accounting for the difference in farm earnings.

The decrease in inventory for the 32 accounting farms in Pike and Brown Counties averaged $307 in 1934. The 1933 inventory values increased $780 per farm, while in 1932 there was an inventory decrease of $776 per farm. The decreases in 1934 were: feed and grain $281; improvements $113, and machinery $33, while livestock showed an increase of $120. The decrease in machinery was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made, but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$2 067	$2 187	$ 120	$
Feed and grains	1 431	1 150	-281	
Machinery	979	946	-33	
Improvements (except residence)	3 434	3 321	-113	
Total	$7 911	$7 604	$-307	$

Some Adjustments on Pike and Brown County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were $1.94 an acre higher in 1934 than in 1933, while cash operating expenses were $1,917 a farm in 1934, as compared with $1,320 a farm in 1933. Due to the drouth and the resultant very low crop yields, it was necessary for the farms in this study to purchase $554 more feed than in 1933. There was also a slight increase in expenditures over the previous year for livestock and machinery, while a considerable decrease occurred in expenditures for taxes. If this area has more favorable weather and crop conditions in 1935, so as to increase their farm income, indications point to an increase in spending for repairs and replacement of machinery and improvements, since farmers have postponed purchase of these items durint the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Pike and Brown Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 247	$ 979	$	$3 013	$4 303
Feed and grains		783	854		562	2 045
Machinery		250	706		37	123
Improvements		87	292		1	3
Labor		151	394		53	41
Miscellaneous		30	29		5	18
Livestock expense		45	58		---	---
Crop expense		130	218		---	---
Taxes		194	393		---	---
Total	$	$1 917	$3 923	$	$3 676	$6 533
Excess of cash sales over expenses				$	$1 759	$2 610
Increase in inventory					-307	711
Income to labor and capital (Receipts less expenses)					1 452	3 321

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 56 percent of that in 1929, cash expenditures were only 49 percent as large. In 1934 livestock purchases were 25 percent, and feed and grain purchases 92 percent as large as in 1929. In 1934 these farms paid out 35 percent as much for machinery, 30 percent as much for improvements, 38 percent as much for labor, and 59 percent as much for crop expense as in 1929, while taxes were reduced to 50 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $6.97, as compared with a loss of $2.20 per acre for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were more intensive and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $9.34 per acre, and fed $3,839 of feed per farm, as compared with $4.78 invested per acre, and $1,215 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $130 for each $100 of feed fed, as compared with a return of $111 for each $100 of feed fed on the least profitable farms. The most profitable farms had an income of $92 per litter farrowed, as compared with $77 per litter farrowed on the least profitable farms. There were returns of $85 for each $100 invested in cattle on the most profitable farms, as compared with returns of $55 per $100 invested in cattle on the low-profit group.

The most profitable farms in this study were 134.9 acres larger, and had a larger proportion of their land area tillable than the least profitable farms. They had 52.9 acres more corn, 14.0 acres more oats, 4.3 acres more wheat, 9.8 acres more hay, and 24.6 acres more tillable pasture than the least profitable farms. The most profitable farms carried much larger inventories of feed and grain on which to make a profit when prices advanced. Besides the larger acreage of crops, another reason for the larger inventories was the higher crop yields, there being an advantage of 6.2 bushels of corn, 7.7 bushels of oats, and 12.4 bushels of wheat per acre in favor of the high-profit group.

The larger income on the most profitable farms was secured with a total operating cost of $8.17 per acre, as compared with $9.01 per acre for the least profitable farms. The man labor cost per crop acre on the most profitable farms was $5.25, as compared with $9.69 per crop acre on the least profitable farms. The power and machinery cost per crop acre was $3.27 on the most profitable farms, and $3.37 per crop acre for the low-profit group.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	Average of of all payments 1/
1/3 most profitable farms	11	$129	1	$ 66	11	$349	$483
1/3 least profitable farms	9	67	2	40	10	164	211
All accounting farms	29	102	6	74	31	245	343

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On most farms the cash received from benefit payments will more than pay for the year's taxes. As an average of all accounting farms in this study, the payments actually received were $149 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 18.8 contracted acres which were used as follows: 5.4 idle; 3.8 mixed clover and timothy; 6.7 sweet clover, 1.3 soybeans; and 1.6 acres alfalfa. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 32 Pike and Brown County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
Size of farms--acres		249.7	339.3	204.4
Percent of land area tillable		75.5	74.2	66.5
Percent of tillable land in hay and pasture		49.7	44.4	57.1
Gross receipts per acre		11.81	15.14	6.81
Total expenses per acre		8.73	8.17	9.01
Net receipts per acre		3.08	6.97	-2.20
Value of land per acre		71	75	56
Total investment per acre		102	109	82
Acres in Corn		48.6	77.3	24.4
Oats		17.3	26.1	12.1
Wheat		13.3	14.8	10.5
Hay		27.6	32.7	22.9
Tillable pasture		66.1	79.3	54.7
Crop yields--Corn, bu. per acre		5.9	9.0	2.8
Oats, bu. per acre		6.9	9.5	1.8
Wheat, bu. per acre		17.6	24.1	11.7
Value of feed fed to productive L.S.		2 370	3 839	1 215
Returns per $100 of feed fed to productive livestock		120	130	111
Returns per $100 invested in:				
Cattle		80	85	55
Poultry		175	115	192
Pigs weaned per litter		6.4	6.3	6.4
Income per litter farrowed		91	92	77
Dairy sales per dairy cow		26	23	24
Investment in productive L.S. per A.		7.11	9.34	4.78
Receipts from productive L.S. per A.		11.41	14.67	6.58
Man labor cost per crop acre		6.34	5.25	9.69
Machinery cost per crop acre		2.01	2.24	1.61
Power and mach. cost per crop A.		3.22	3.27	3.37
Farms with tractor		69%	82%	45%
Value of feed fed to horses		184	242	165
Man labor cost per $100 gross income		26	18	57
Expenses per $100 gross income		74	54	132
Farm improvements cost per acre		.80	.91	.62
Excess of sales over cash expenses		1 759	2 901	784
Increase in inventory		-307	111	-465
Rate earned on investment		3.01%	6.40%	-2.68%
Gross receipts per farm		2 949	5 138	1 392

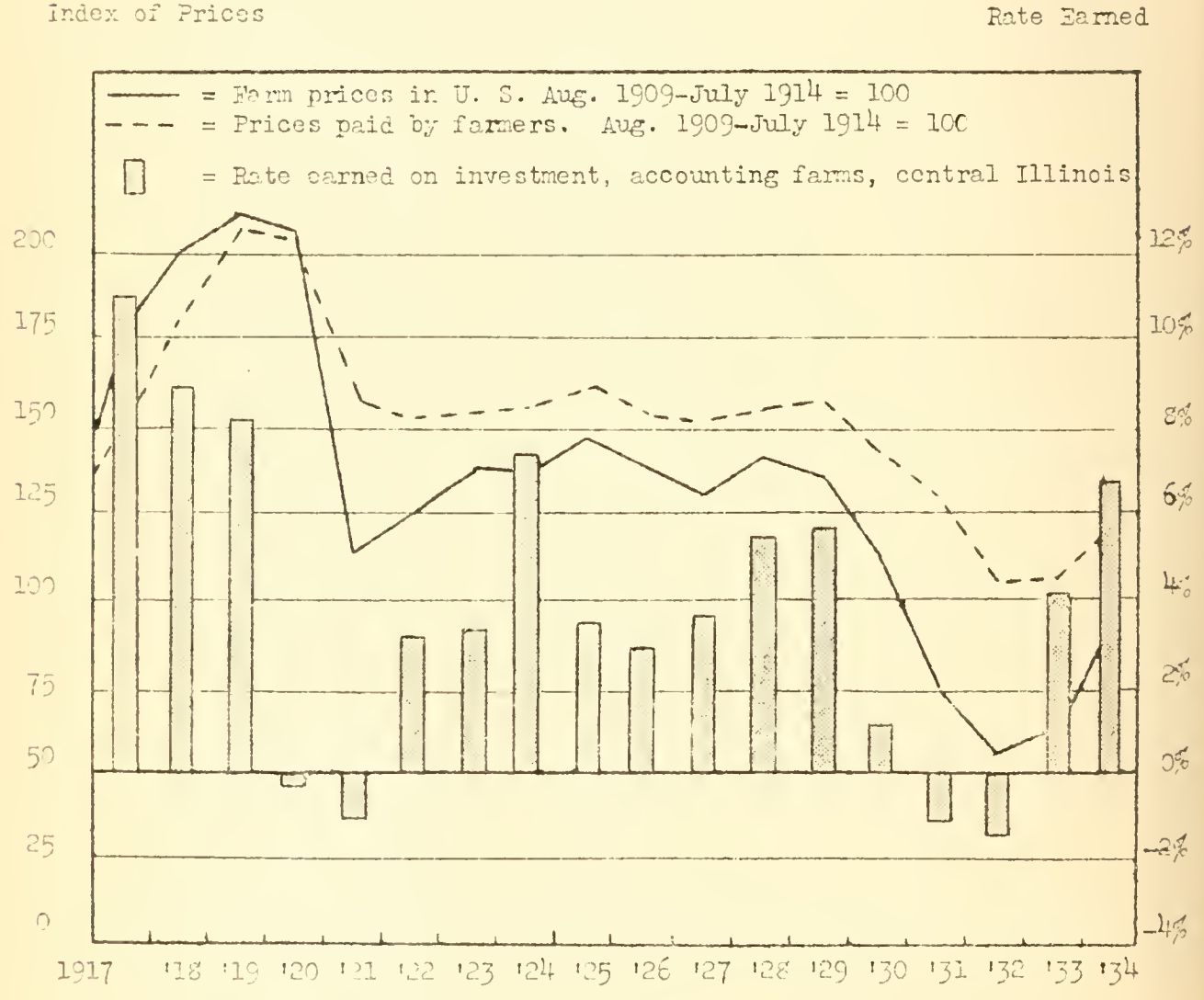
Chart for Studying the Efficiency of Various Parts of Your Business, Pike and Brown Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 32 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
13.0	16	22	33	141	56	300	170	--	--	--	1700	4250	27	6700	450
11.0	14	19	30	131	50	275	160	.25	--	2	1300	3750	24	5950	410
9.0	12	16	27	121	44	250	150	1.75	.22	8	900	3250	21	5200	370
7.0	10	13	24	111	38	225	140	3.25	1.22	14	500	2750	18	4450	330
5.0	8	10	21	101	32	200	130	4.75	2.22	20	100	2250	15	3700	290
3.01	5.9	6.9	17.6	91	26	175	120	6.34	3.22	26	-307	1759	11.81	2949	249.7
1.0	4	4	15	81	20	150	110	7.75	4.22	32	-700	1250	9	2200	210
-1.0	2	1	12	71	14	125	100	9.25	5.22	38	-1100	750	6	1450	170
-3.0	0	--	9	61	8	100	90	10.75	6.22	44	-1500	250	3	700	130
-5.0	--	--	6	51	2	75	80	12.25	7.22	50	-1900	--	0	--	90
-7.0	--	--	3	41	--	50	70	13.75	8.22	56	-2300	--	--	--	50

Influence of Price Changes on Farm Earnings

Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



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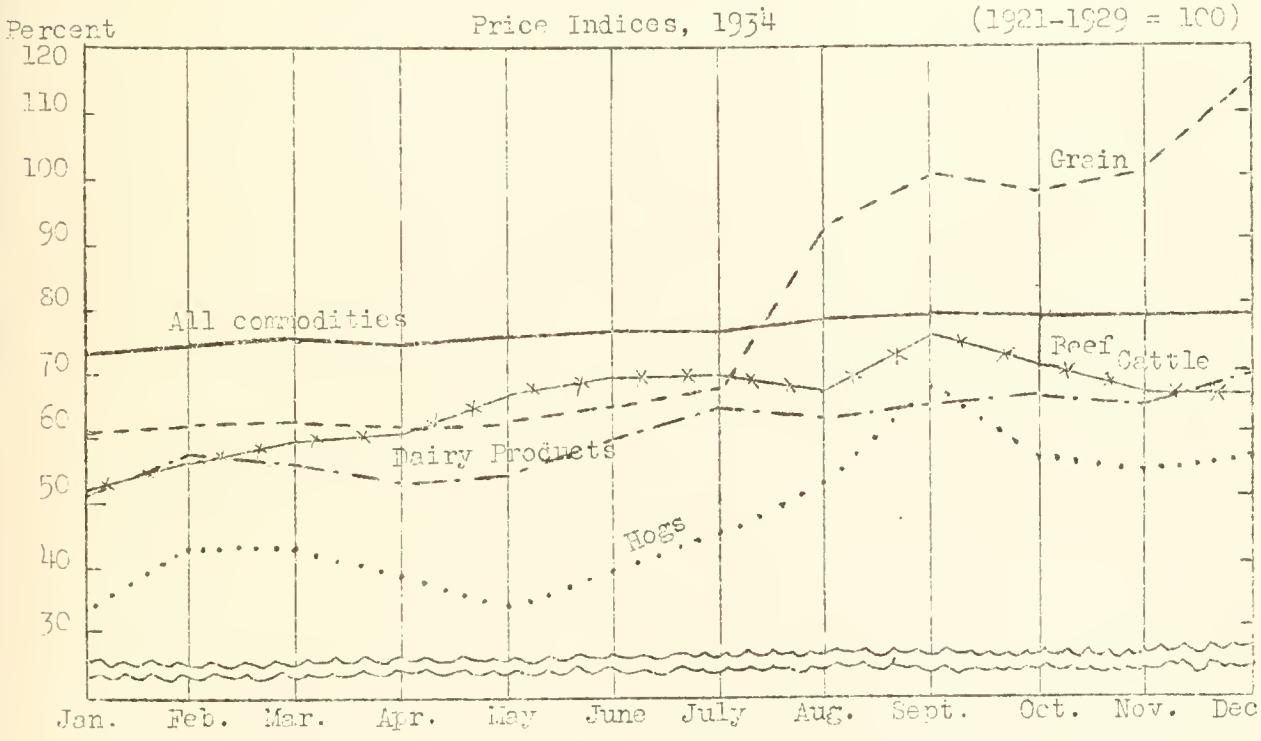

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Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Pike and Brown Counties for the last five years is very interesting because of the violent fluctuations in price level. Although the 1934 crop was nearly a failure, and followed a smaller than average crop of 1933, the increased prices of both grain and livestock did have considerable effect in holding earnings in second place for the five-year period 1930-1934.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Pike and Brown Counties for 1930-1934

Items	1930 1/	1931 2/	1932	1933 3/	1934
Number of farms	52	43	30	47	32
Average size of farms, acres	244	218	248	252	250
Average rate earned, to pay for management, risk and capital	2.0%	-2.1%	-1.5%	5.1%	3.0%
Average labor and management wage	$-446	$-1 544	$-1 309	$535	$ 8
Gross income per acre	16.21	9.43	7.39	12.24	11.81
Operating cost per acre	13.18	12.34	9.09	6.79	8.73
Average value of land per acre	105	93	72	82	71
Total investment per acre	153	137	110	108	102
Investment per farm in:					
Total livestock	3 804	2 870	2 621	1 496	2 067
Cattle	1 942	1 363	1 426	667	1 144
Hogs	1 044	845	654	328	461
Poultry	153	120	80	80	45
Gross income per farm	3 947	2 056	1 834	3 087	2 949
Income per farm from:					
Crops	---	---	---	1 559	---
Miscellaneous income	64	47	52	36	5
Total livestock	3 883	2 009	1 782	1 492	2 886
Cattle	680	415	483	263	849
Dairy sales	302	211	180	161	96
Hogs	2 654	1 211	983	902	1 738
Poultry	218	152	104	29	~~32~~ 77
Average yield of corn in bu.	33	42	35	42	6
Average yield of wheat in bu.	22	24	34	17	18

1/ Records from Pike, Brown, Menard, and Cass Counties included for 1930.
2/ Records from Pike, Cass, and Brown Counties included for 1931.
3/ Records from Cass, Mason, Pike, and Brown Counties included for 1933.

ANNUAL FARM BUSINESS REPORT ON FORTY-NINE FARMS IN MADISON COUNTY, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and J. E. Wills*

Farm earnings of the 49 account keeping farmers in Madison County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the earnings, and the highest year since 1929.

These 49 accounts show for 1934 an average net income of $794 per farm, as compared with an average of $265 in 1933 and an average net loss of $424 in 1932. The average cash income in 1934 was $2,748 per farm, the cash business expenditures $1,560 per farm, leaving a cash balance of $1,188 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $275 a farm due mostly to the rise in prices of farm products. This increase added to the cash balance, resulted in an average excess of receipts over expenses of $1,463 a farm. Both the inventory increase and the cash balance were larger in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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*T. W. May, farm adviser in Madison County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932 and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investments on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $350 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state were compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yield of wheat and soybeans was much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 49 accounting farms the most successful third shows an average net income of $1,435, while the average net income on the least successful third of the farms was $176. In 1933 the comparable net income for the two groups was $843 and $-343 respectively.

Investments, Receipts, Expenses and Earnings on
49 Madison County Farms in 1934

Items	Your farm	Average of 49 farms	16 most profitable farms	16 least profitable farms
CAPITAL INVESTMENTS				
Land		9 374	9 883	8 577
Farm improvements		2 759	2 576	2 758
Livestock total		1 299	1 411	1 009
Horses		320	310	269
Cattle		735	808	514
Hogs		132	165	112
Sheep		14	11	21
Poultry		98	117	93
Machinery and equipment		1 305	1 369	1 063
Feed and grains		1 035	1 122	919
Total capital investment	$	$15 772	$16 361	$14 326
RECEIPTS AND NET INCREASES				
Livestock total		1 502	1 898	1 023
Horses		19	18	16
Cattle		127	158	100
Hogs (including AAA payments)		309	371	229
Sheep		21	11	33
Poultry		120	199	42
Egg sales		141	214	105
Dairy sales		765	927	498
Feed and grain (including AAA payments)		818	877	725
Labor off farm		78	106	84
Miscellaneous receipts		2	6	1
Total receipts & net increases	$	$ 2 400	$ 2 887	$ 1 833
EXPENSES AND NET DECREASES				
Farm improvements		171	109	192
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		242	193	242
Feed and grains		---	---	---
Livestock expense		25	34	19
Crop expense		152	141	155
Hired labor		155	160	184
Taxes		165	146	163
Miscellaneous expenses		27	26	27
Total expenses & net decreases	$	$ 937	$ 809	$ 982
RECEIPTS LESS EXPENSES	$	$ 1 463	$ 2 078	$ 851
Total unpaid labor		669	643	675
Operator's labor		411	420	394
Family labor		258	223	281
Net income from investment and management		794	1 435	176
RATE EARNED ON INVESTMENT	%	5.03%	8.77%	1.23%
Return to capital and operator's labor and management		1 205	1 855	570
% of capital invested		739	818	716
LABOR AND MANAGEMENT WAGE	$	$ 416	$ 1 037	$ -146

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15.	1	$5.	6
13.	2	3.	14
11.	2	1.	7
9.	3	-1.	1
7.	11	-3.	2

A further study of the farm businesses, made by comparing the investments, receipts and expenses of the group of farms having the highest net income with those having the lowest, will throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most successful farms average 169 acres each; the least successful 149 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. Difference in receipts from the sales of livestock and livestock products accounts for much of the difference in income between the two groups.

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	577	192
Average of 16 most successful farms .	722	302
Average of 16 least successful farms.	515	161
Your farm.		

The carry-over of corn on Madison County farms is not a large item, but it was significant in 1934 because of the rapid increase of corn prices.

The average inventory increase for the accounting farms in Madison County was $275, as compared with decreases of $148 in 1933 and $638 in 1932. There were decreases of $8 in livestock and $45 in improvements, and increases of $258 in feed and grain, and $70 in machinery. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of the depreciation. This increase is of considerable interest, for it is the first time that such an increase in machinery has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 299	$1 291	$ -8	$
Feed and grains	1 035	1 293	258	
Machinery	1 305	1 375	70	
Improvements (except residence)	2 759	2 714	-45	
Total	$6 398	$6 673	$275	$

Some Adjustments on Madison County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1930 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 53 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,560 a farm in 1934 as compared with $1,048 in 1933. The largest increase in cash expenses over the previous year was for machinery and repairs for machinery. Indications point to an even greater expansion of spending for these items in 1935, since farmers have postponed machinery replacements during the four-year period since 1930.

Cash Income and Expenses on Accounting Farms in Madison County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 136	$ 352	$	$1 646	$3 240
Feed and grains		319	638		879	615
Machinery		454	448		142	51
Improvements		127	264		1	4
Labor		155	201		78	80
Miscellaneous		27	27		2	10
Livestock expense		25	25		---	---
Crop expense		152	138		---	---
Taxes		165	169		---	---
Total	$	$1 560	$2 262	$	$2 748	$4 000
Excess of cash sales over expenses				$	$1 188	$1 738
Increase in inventory					275	249
Income to labor and capital (Receipts less expenses)					1 463	1 987

The cash expense in 1934 was 69 percent of the 1929 figure, and the cash income in 1934 was also 69 percent of the 1929 figure. In other words, the relationship of total cash income to total cash expense was the same in 1934 as it was in 1929, but the total amounts were 31 percent less. However, there was considerable difference in the distribution of expenses. In 1934, livestock bought was 39 percent, feed 50 percent, improvements 48 percent, and labor 77 percent of the cash expenditures for these items in 1929. Machinery and crop expenses were higher in 1934 than in 1929, and miscellaneous expenses, livestock expenses, and taxes were practically the same. These figures indicate that the relatively higher cash outlay in 1934 was only for items that had to do directly with the operation of the farm and the repair and replacement of needed machinery, while repairs on improvements and other expenditures were being held to a minimum.

The cash income from livestock in 1934 was only 51 percent of the 1929 figure, while the cash income from the sale of crops in 1934 was 43 percent higher than the corresponding figure in 1929. This reflects the relatively high prices of grain as compared with the price of livestock and livestock products.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $8.50, as compared with $1.18 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most profitable farms were 19.9 acres larger, and had 15.3 more crop acres than the least profitable farms. They also carried larger inventories of both crops and livestock on which to make a profit when prices advanced.

The most profitable farms were more intensive and more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $6.43 per acre, and fed $1,431 of feed per farm, as compared to $4.64 per acre and $1,008 per farm on the least profitable farms. The livestock on the most profitable farms returned $131 for each $100 of feed fed them, as compared to $100 returns for $100 of feed fed on the least profitable farms.

Crop yields, while important, were not enough higher on the most profitable farms to account for much of the difference in earnings. This difference in yields was only 2.2 bushels for corn, 2.5 bushels for oats, and .5 bushels for wheat.

Higher total operating expenses on the least profitable farms, amounting to $2.53 an acre, was an important factor in the reduced net earnings of this group. Every item of expense except livestock expense was higher on the least profitable farms. Man labor costs per crop acre were $6.76 on the most profitable farms, as compared to $8.41 on the least profitable farms, while power and machinery costs per crop acre amounted to $3.20 on the most profitable farms, and $4.46 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 books.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	14	$55	14	$130	13	$79	$227
1/3 least profitable farms	14	39	13	120	11	56	170
All accounting farms	41	49	42	124	38	70	202

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

As an average of all accounting farms, the payments actually received ($202), were more than sufficient to pay all of the 1934 taxes, ($165).

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 14.7 contracted acres which were used as follows: 4.4 idle; 1.4 red clover; 2.9 sweet clover; 2.0 soybeans and cowpeas; 2.1 alfalfa and 1.9 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as most of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
49 Madison County Farms in 1934

Items	Your farm	Average of 49 farms	16 most profitable farms	16 least profitable farms
Size of farms--acres		162.6	168.9	149
Percent of land area tillable		84.5	82.7	82.8
Percent of tillable land in hay and pasture		39.5	36.6	37.6
Gross receipts per acre		14.76	17.09	12.30
Total expenses per acre		9.88	8.59	11.12
Net receipts per acre		4.88	8.50	1.18
Value of land per acre		58	59	58
Total investment per acre		97	97	96
Acres in Corn		29.7	33	26
Oats		11.2	10.6	9.9
Wheat		35.7	39.3	32.7
Soybeans		1.4	1.6	1.8
Hay		25.1	24.7	20.9
Tillable pasture		29.2	26.5	25.4
Crop yields--Corn, bu. per acre		12.7	14.5	12.3
Oats, bu. per acre		11.8	12.5	10
Wheat, bu. per acre		24.1	24.2	23.7
Value of feed fed to productive L.S.		1 224	1 431	1 008
Returns per $100 of feed fed to productive livestock		121	131	100
Returns per $100 invested in:				
Cattle		125	137	127
Poultry		249	308	166
Pigs weaned per litter		6.7	6.3	6.6
Income per litter farrowed		77	74	73
Dairy sales per dairy cow		67	72	54
Investment in productive L.S. per A.		5.90	6.43	4.64
Receipts from productive L.S. per A.		9.12	11.13	6.76
Man labor cost per crop acre		7.32	6.76	8.41
Machinery cost per crop acre		2.24	1.70	2.47
Power and mach. cost per crop A.		4.00	3.20	4.46
Farms with tractor		69.4%	81%	69%
Value of feed fed to horses		210	202	211
Man labor cost per $100 gross income		33	26	45
Expenses per $100 gross income		67	50	90
Farm improvements cost per acre		1.05	.65	1.29
Excess of sales over cash expenses		1 188	1 570	676
Increase in inventory		275	508	175
Rate earned on investment		5.03	8.77	1.23
Gross receipts per farm		2 400	2 387	1 833

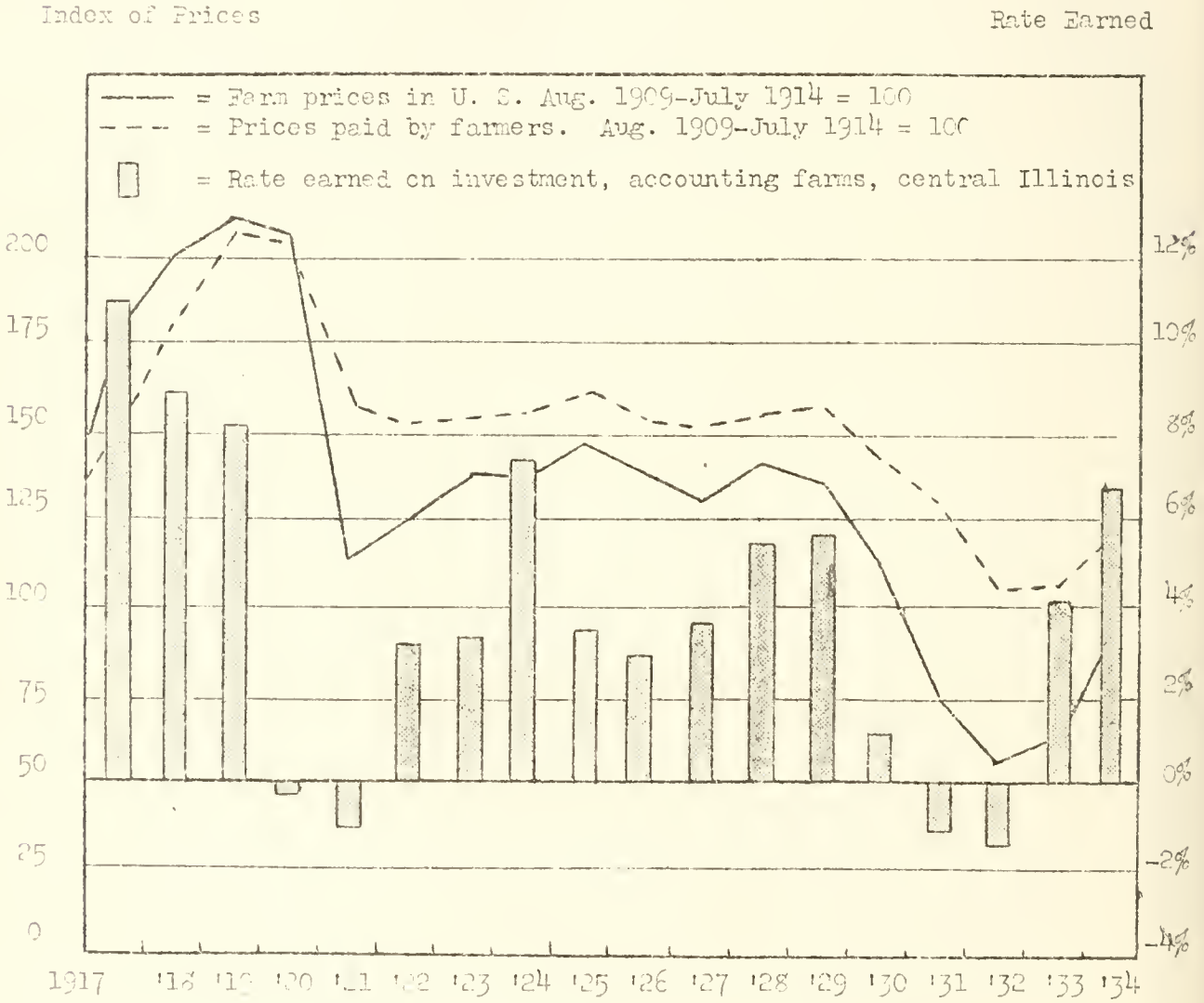
Chart for Studying the Efficiency of Various Parts of Your Business, Madison County, 1934

The numbers above the lines across the middle of the page are the averages for the 49 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
10	25.0	32	34	127	117	450	221	1.32	--	--	1275	2700	25	4400	263
9	22.5	28	32	117	107	410	201	2.52	--	--	1075	2400	23	4000	243
8	20.0	24	30	107	97	370	181	3.72	1.00	3	875	2100	21	3600	223
7	17.5	20	28	97	87	330	161	4.92	2.00	13	675	1800	19	3200	203
6	15.0	16	26	87	77	290	141	6.12	3.00	23	475	1500	17	2800	183
5.03	12.7	11.8	24.1	77	67	249	121	7.32	4.00	33	275	1188	14.76	2400	162.6
4	10.0	8	22	67	57	210	101	8.52	5.00	43	75	900	13	2000	143
3	7.5	4	20	57	47	170	81	9.72	6.00	53	-125	600	11	1600	123
2	5.0	--	18	47	37	130	61	10.92	7.00	63	-325	300	9	1200	103
1	2.5	--	16	37	27	90	41	12.12	8.00	73	-525	0	7	800	83
0	0	--	14	27	17	50	21	13.62	9.00	83	-725	-300	5	400	63

Influence of Price Changes on Farm Earnings

Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



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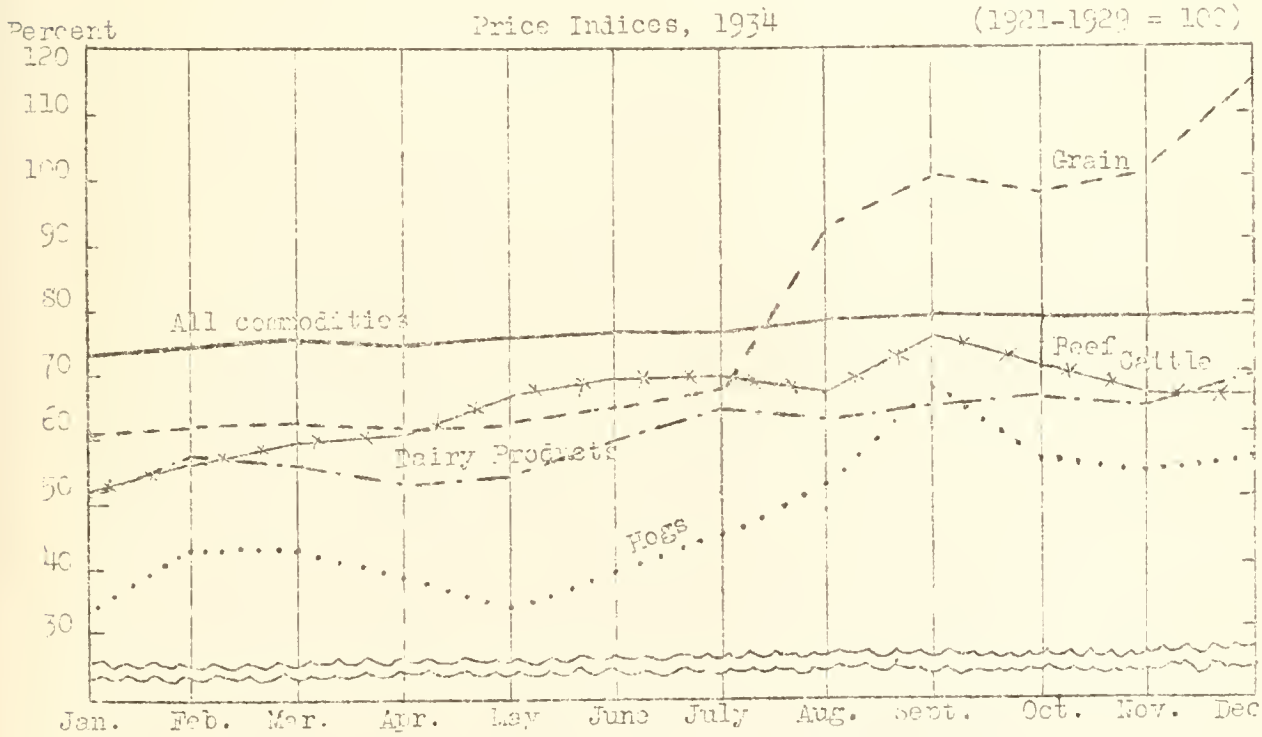

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Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Madison County for the last five years is very interesting because of the violent fluctuations in price level. 1934 was the second year of low crop yields, yet total receipts per farm were higher than any other year since 1930 and because of relatively lower expenses the rate earned of 5.03 percent is the highest of any year during the past five.

Earnings in 1935 as usual will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Madison County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	41	47	38	33	49
Average size of farms, acres	154	156	170.4	153.5	163
Average rate earned, to pay for management, risk and capital	1.6%	-2.05%	-2.69	1.75%	5.03%
Average labor and management wage	$-50	$-758	$-823	$-89	416
Gross income per acre	17.03	10.36	8.30	11.08	14.76
Operating cost per acre	15.14	12.66	11.12	9.35	9.38
Average value of land per acre	67	62	58	56	58
Total investment per acre	121	112	105	99	97
Investment per farm in:					
Total livestock	2 299	2 017	1 607	1 428	1 299
Cattle	1 413	1 255	993	849	735
Hogs	263	234	168	148	132
Poultry	234	183	147	128	98
Gross income per farm	2 623	1 617	1 249	1 701	2 400
Income per farm from:					
Crops	---	---	---	470	818
Miscellaneous income	91	86	99	76	2
Total livestock	2 532	1 531	1 150	1 145	1 502
Cattle	230	---	---	107	127
Dairy sales	1 377	941	645	572	765
Hogs	477	289	245	275	309
Poultry	435	296	251	170	180 1/
Average yield of corn in bu.	25	34	48	22	13
Average yield of wheat in bu.	16	27	18	17	24

ANNUAL FARM BUSINESS REPORT ON THIRTY-THREE FARMS IN RANDOLPH COUNTY, ILLINOIS, 1934

P. E. Johnston, J. Ackerman, and J. B. Andrews*

The farm earnings of 33 account-keeping farmers in Randolph County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 33 accounts show for 1934 an average net income of $817 per farm, as compared with an average of $344 in 1933, and an average net loss of $364 in 1932. The average cash income in 1934 was $2,142 per farm, the cash business expenditures $1,031 per farm, leaving a cash balance of $1,111 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $367 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,478 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

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*E. C. Secor, farm adviser in Randolph County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 33 accounting farms the most successful one-third shows an average net income of $1,434, while the average net income of the least successful one-third of the farms was only $213. In 1933 the comparable net incomes for the two groups was $1,057, and $-318 respectively.

Investments, Receipts, Expenses and Earnings on
33 Randolph County Farms in 1934

Items	Your farm	Average of 33 farms	11 most profitable farms	11 least profitable farms
CAPITAL INVESTMENTS				
Land		7 723	7 469	8 052
Farm improvements		2 399	2 199	2 540
Livestock total		1 030	950	966
Horses		304	265	324
Cattle		519	519	429
Hogs		95	98	99
Sheep		14	--	18
Poultry		98	68	96
Machinery and equipment		1 126	1 161	1 053
Feed and grains		1 003	967	762
Total capital investment	$	$13 281	$12 746	$13 373
RECEIPTS AND NET INCREASES				
Livestock total		1 105	1 220	851
Horses		15	18	--
Cattle		168	199	56
Hogs (including AAA payments)		206	251	162
Sheep		29	--	30
Poultry		51	37	52
Egg sales		156	107	163
Dairy sales		430	608	388
Feed and grains (including AAA payments)		982	1 380	686
Labor off farm		53	105	36
Miscellaneous receipts		3	7	1
Total receipts & net increases	$	$ 2 143	$ 2 712	$ 1 574
EXPENSES AND NET DECREASES				
Farm improvements		107	118	108
Horses		---	---	4
Miscellaneous livestock decreases Sheep		---	1	---
Machinery and equipment		210	181	197
Feed and grains		---	---	---
Livestock expense		15	12	24
Crop expense		133	154	114
Hired labor		57	100	26
Taxes		119	109	117
Miscellaneous expenses		24	24	25
Total expenses & net decreases	$	$ 665	$ 699	$ 615
RECEIPTS LESS EXPENSES	$	$ 1 478	$ 2 013	$ 959
Total unpaid labor		661	579	746
Operator's labor		409	420	420
Family labor		252	159	326
Net income from investment and management		817	1 434	213
RATE EARNED ON INVESTMENT	%	6.15%	11.25%	1.59%
Return to capital and operator's labor and management		1 226	1 854	633
5% of capital invested		664	637	668
LABOR AND MANAGEMENT WAGE	$	$ 562	$ 1 217	$ -35

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$11	2	$3	8
9	2	1	7
7	4	-1	1
5	9		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes, with those having the lowest incomes, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms had a smaller total capital investment than the least profitable farms, or the average of all the farms. Despite the smaller investment, the most profitable farms had higher total receipts and net increases, a major part of which was due to larger sales of feed and grains and dairy products. The most profitable farms also had higher returns from cattle and hogs.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Grain Inventoried

	Corn		Wheat	
	Jan. 1, 34	Dec. 31, 34	Jan. 1, 34	Dec. 31, 34
Average of all farms.	550	250	319	347
Average of 11 high farms. . .	563	322	203	313
Average of 11 low farms . . .	387	138	221	274
Your farm.				

The difference in quantities of grain inventoried was one of the factors influencing the difference in earnings. The most profitable farms had a larger inventory of corn both at the beginning and at the end of the year, and a larger inventory of wheat at the end of the year than did the least profitable farms.

The average inventory increase for the accounting farms in Randolph County was $367, as compared with $115 in 1933, and a decrease of $526 in 1932. There were increases of $415 in feed and grain, and $24 in livestock, as compared to decreases of $38 in improvements, and $34 in machinery. The inventory decrease in machinery and improvements was the smallest since 1929 on account-keeping farms, and indicates that needed repairs and replacements are being made but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 030	$1 054	$ 24	$
Feed and grains	1 003	1 418	415	
Machinery	1 126	1 092	-34	
Improvements (except residence)	2 399	2 361	-38	
Total	$5 558	$5 925	$ 367	$

Some Adjustments on Randolph County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 13 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,031 a farm in 1934 as compared with $1,026 in 1933. There was a slight increase in expenditures over the previous year for crop expenses and improvements, and a slight decrease in expenses for taxes, livestock, and labor. Indications point to an increase of spending in 1935 for repairs and replacement of machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in Randolph County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 173	$ 165	$	$1 254	$2 050
Feed and grains		196	317		763	948
Machinery		240	357		64	55
Improvements		74	204		5	2
Labor		57	221		53	32
Miscellaneous		24	24		3	7
Livestock expense		15	14		---	---
Crop expense		133	144		---	---
Taxes		119	148		---	---
Total	$	$1 031	$1 594	$	$2 142	$3 094
Excess of cash sales over expenses				$	$1 111	$1 500
Increase in inventory					367	253
Income to labor and capital (Receipts less expenses)					1 478	1 753

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average total cash income in 1934 was 69 percent of that of 1929. The total cash expenditures were 65 percent as large as in 1929. In 1929 the average accounting farms in Randolph County spent 52 percent of the cash income for operating expenses; in 1934 they spent 48 percent. The relationship between income and expenses is approximately the same for the two years. There is, however, considerable difference in the distribution of the expense items. In 1934, machinery was 67 percent, feed 62 percent, improvements 36 percent, hired labor 26 percent, and taxes 80 percent of the cash expenditure for these items in 1929. Crop expenses and livestock purchases were almost the same in 1934 as in 1929.

Comparison of Farm With High and Low Earnings

After deducting total expenses and net decreases, including family labor, from income and net increases there remained a net increase of $7.56 per acre for the most profitable farms, as compared with $1.15 per acre for the least profitable farms. This represents a return on the capital invested in the farm business of 11.25 percent on the most profitable farms, and 1.59 percent on the least profitable farms. The reasons for the difference may be obtained from a study of the data on pages 3 and 8.

In Randolph County the most profitable farms averaged only 5 acres larger than the least profitable farms, but they carried larger inventories on both crops and livestock on which to make a profit when prices advanced. One reason for the larger inventories, however, was the higher crop yields, there being an advantage of 11.7 bushels of corn, 4 bushels of oats, and 3.3 bushels of wheat per acre in favor of the high profit group.

The most profitable farms had an investment in productive livestock of $3.77 per acre, and fed $1,132 of feed per farm, as compared with $3.45 per acre, and $951 of feed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $106 for each $100 of feed fed, as compared with a return of $89 for the least profitable farms. Dairy sales were $19 per cow higher, and income per litter farrowed $19 higher on the most profitable farms.

The larger income on the most profitable farms was secured with a total operating cost of $6.73 per acre, as compared with $7.37 per acre for the least profitable farms. The man labor costs were 98 cents per crop acre lower, while power and machinery costs were 5 cents per crop acre lower, for the most successful farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	9	$50	10	$145	7	$52	$205
1/3 least profitable farms	8	33	10	93	6	44	132
All accounting farms	24	48	30	128	19	43	176

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $57 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 16.4 contracted acres which were used as follows: 5.4 idle; .3 red clover; 9.2 sweet clover; .5 soybeans; .4 alfalfa; and .6 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on
33 Randolph County Farms in 1934

Items	Your farm	Average of 33 farms	11 most profitable farms	11 least profitable farms
Size of farms--acres		184.5	189.8	184.7
Percent of land area tillable		83.4	83.7	82.8
Percent of tillable land in hay and pasture		41.6	40.7	41.4
Gross receipts per acre		11.36	14.29	8.52
Total expenses per acre		7.03	6.73	7.37
Net receipts per acre		4.33	7.56	1.15
Value of land per acre		41	39	44
Total investment per acre		70	67	72
Acres in Corn		26.1	29.9	24.6
Oats		14.3	15.5	11.9
Wheat		44.7	44.9	40.8
Soybeans		.6	.4	1.3
Hay		20.7	20.9	20.6
Tillable pasture		44.7	43.8	42.7
Crop yields--Corn, bu. per acre		16.5	21.6	9.9
Oats, bu. per acre		25.8	28.2	24.2
Wheat, bu. per acre		18.9	20.5	17.2
Value of feed fed to productive L.S.		1 073	1 132	951
Returns per $100 of feed fed to productive livestock		102	106	89
Returns per $100 invested in:				
Cattle		126	149	105
Poultry		213	209	221
Pigs weaned per litter		6.6	6.8	6.4
Income per litter farrowed		74	93	74
Dairy sales per dairy cow		51	62	43
Investment in productive L.S. per A.		3.84	3.77	3.45
Receipts from productive L.S. per A.		5.78	6.33	4.61
Man labor cost per crop acre		5.91	5.69	6.67
Machinery cost per crop acre		1.87	1.57	1.79
Power and mach. cost per crop A.		3.50	3.37	3.42
Farms with tractor		63.6%	72.7%	45%
Value of feed fed to horses		199	225	176
Man labor cost per $100 gross income		31	24	47
Expenses per $100 gross income		62	47	86
Farm improvements cost per acre		.57	.62	.58
Excess of sales over cash expenses		1 111	1 221	751
Increase in inventory		367	792	208
Rate earned on investment		6.15	11.25	1.59
Gross receipts per farm		1 478	2 013	959

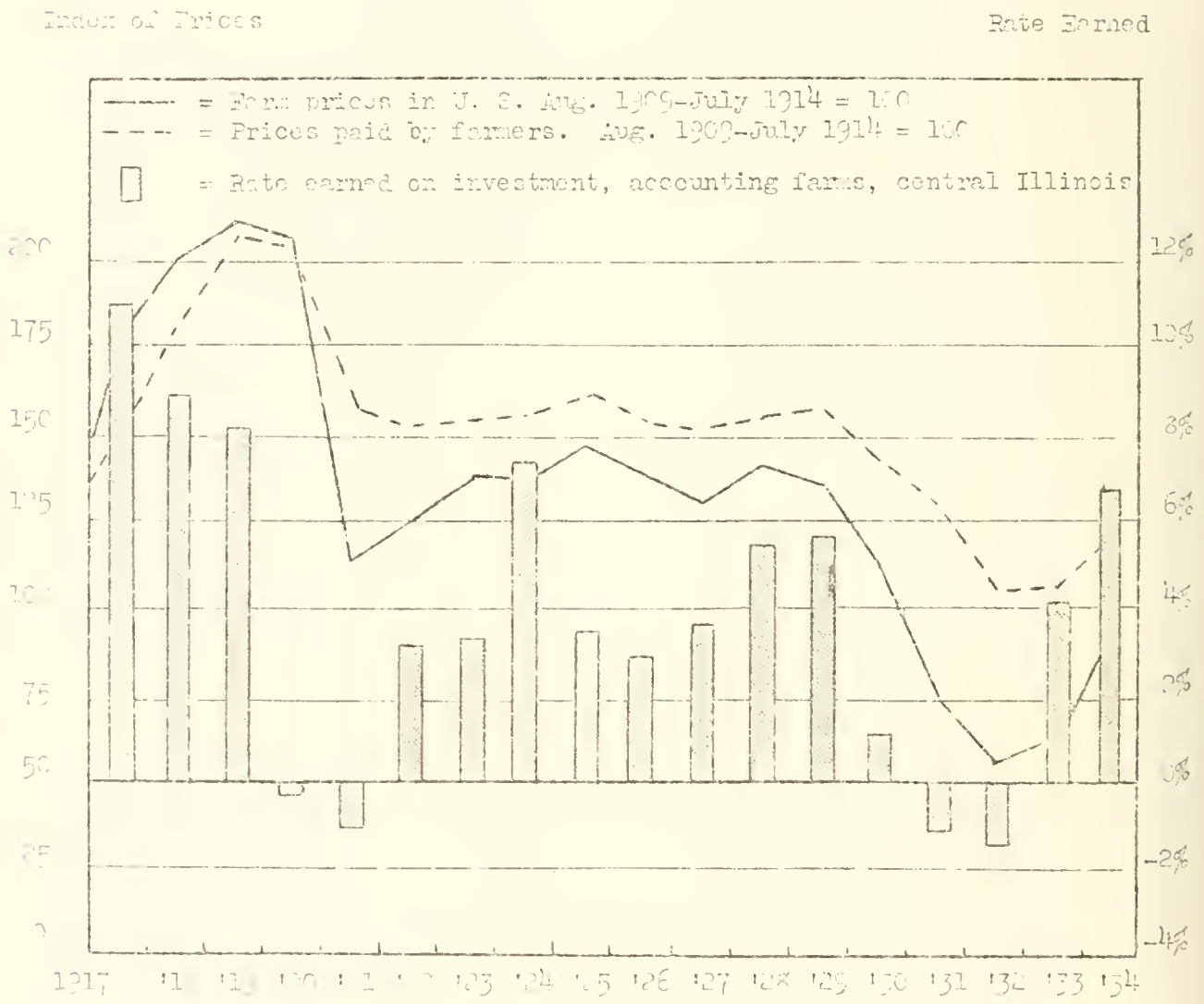
Chart for Studying the Efficiency of Various Parts of Your Business, Randolph County, 1934

The numbers above the lines across the middle of the page are the averages for the 33 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Wheat	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
13.7	36	46	29	124	101	363	177	.91	.50	--	2900	2600	21	4600	288
12.2	32	42	27	114	91	333	162	1.91	1.10	--	2400	2300	19	4100	268
10.7	28	38	25	104	31	303	147	2.91	1.70	7	1900	2000	17	3600	248
9.2	24	34	23	94	71	273	132	3.91	2.30	15	1400	1700	15	3100	228
7.7	20	30	21	84	61	243	117	4.91	2.90	23	900	1400	13	2600	208
6.15	16.5	25.8	18.9	74	51	213	102	5.91	3.50	31	367	1111	11.36	2143	188
4.7	12	22	17	64	41	183	87	6.91	4.10	39	-100	800	9	1600	168
3.2	8	18	15	54	31	153	72	7.91	4.70	47	-600	500	7	1100	148
1.7	4	14	13	44	21	123	57	8.91	5.30	55	-1100	200	5	600	128
.2	--	10	11	34	11	93	42	9.91	5.90	63	-1200	-100	3	100	108
-1.3	--	6	9	24	1	63	27	10.91	6.50	71	-1700	-400	1	--	88

Influence of Price Changes on Farm Earnings

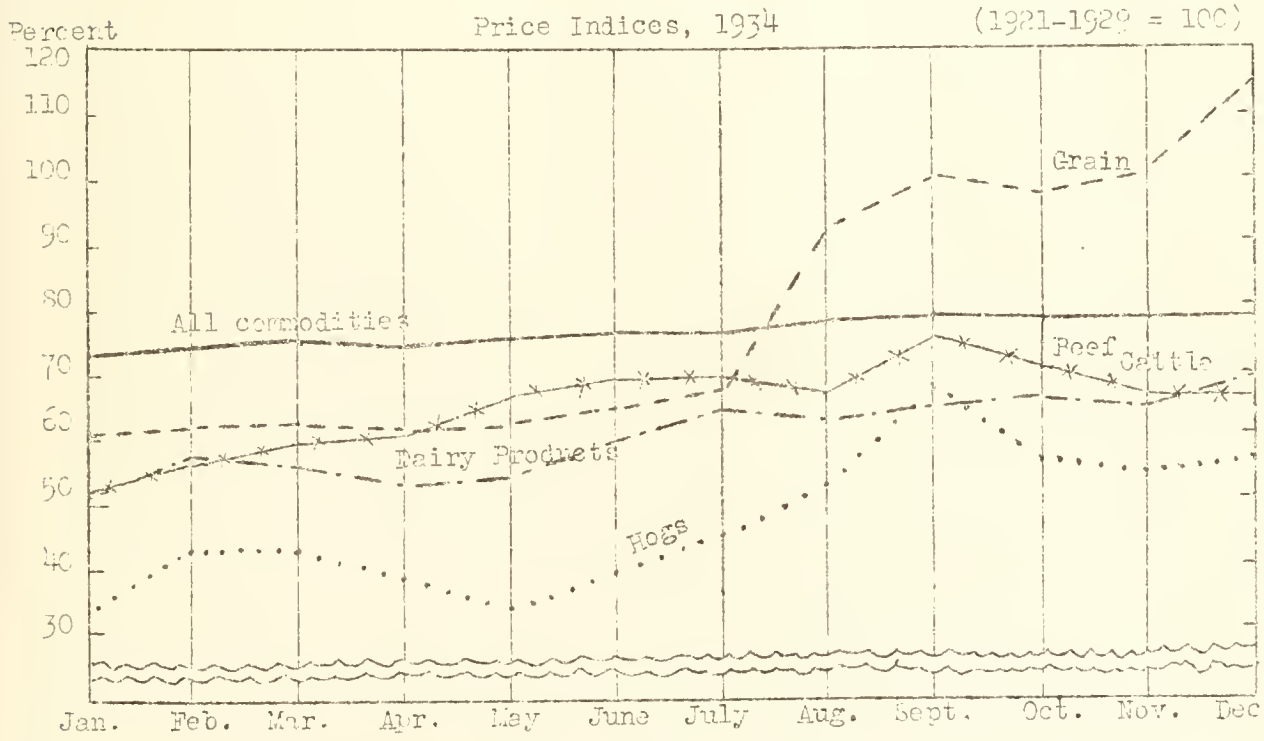
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Randolph County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five and were 75 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1928.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Randolph County for 1930-1934

Items	1930 1/	1931 1/	1932 1/	1933	1934
Number of farms	32	30	39	30	33
Average size of farms, acres	190	190	201	196	188
Average rate earned, to pay for management, risk and capital	0.3%	-1.0%	-2.4%	2.3%	6.15%
Average labor and management wage	$-237	$-521	$-711	$ 72	$ 562
Gross income per acre	10.25	8.44	5.46	8.65	11.36
Operating cost per acre	9.96	9.28	7.27	6.90	7.03
Average value of land per acre	53	51	45	43	41
Total investment per acre	94	87	76	70	70
Investment per farm in:					
Total livestock	1 834	1 550	1 246	1 107	1 030
Cattle	963	809	626	557	519
Hogs	212	164	118	129	95
Poultry	220	193	150	117	98
Gross income per farm	1 945	1 601	1 097	1 699	2 143
Income per farm from:					
Crops	259	382	62	591	982
Miscellaneous income	49	30	26	47	3
Total livestock	1 637	1 189	1 009	1 061	1 105
Cattle	140	56	56	115	168
Dairy sales	716	546	556	508	480
Hogs	321	240	140	250	206
Poultry	444	336	246	172	51
Average yield of corn in bu.	19	31	36	27	16
Average yield of wheat in bu.	20	27	17	16	19

1/ Records from Monroe and Washington counties included for 1930-1932

ANNUAL FARM BUSINESS REPORT ON THIRTY-TWO FARMS IN ST. CLAIR COUNTY, ILLINOIS, 1934

P. E. Johnston, J. Ackerman, and J. B. Andrews*

The farm earnings of 32 account-keeping farmers in St. Clair County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 32 accounts show for 1934 an average net income of $952 per farm, as compared with an average of $698 in 1933, and an average net loss of $264 in 1932. The average cash income in 1934 was $3,023 per farm, the cash business expenditures $1,643 per farm, leaving a cash balance of $1,380 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $252 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,632 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* B. W. Tillman, farm adviser in St. Clair County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 32 accounting farms the most successful one-third shows an average net income of $1,380 while the average net income of the least successful one-third of the farms was only $454. In 1933 the comparable net incomes for the two groups was $1,147, and $228 respectively.

Investments, Receipts, Expenses and Earnings on 32
St. Clair County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
CAPITAL INVESTMENTS				
Land		11 824	10 991	13 740
Farm improvements		2 895	2 102	3 631
Livestock total		1 364	1 104	1 739
Horses		396	280	583
Cattle		622	505	723
Hogs		171	172	186
Sheep		49	5	128
Poultry		126	142	119
Machinery and equipment		1 174	994	1 228
Feed and grains		1 117	1 055	1 061
Total capital investment	$	$18 374	$16 246	$21 449
RECEIPTS AND NET INCREASES				
Livestock total		1 618	1 432	1 690
Horses		22	---	71
Cattle		163	176	204
Hogs (including AAA payments)		416	400	418
Sheep		54	8	139
Poultry		118	185	54
Egg sales		255	246	214
Dairy sales		590	417	590
Feed and grains (including AAA payments)		863	1 228	469
Labor off farm		64	101	20
Miscellaneous receipts		1	2	1
Total receipts & net increases	$	$ 2 551	$ 2 763	$ 2 180
EXPENSES AND NET DECREASES				
Farm improvements		163	138	162
Horses		---	17	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		227	181	239
Feed and grains		---	---	---
Livestock expense		32	19	35
Crop expense		186	159	183
Hired labor		129	132	149
Taxes		152	154	157
Miscellaneous expenses		30	32	30
Total expenses & net decreases	$	$ 919	$ 832	$ 955
RECEIPTS LESS EXPENSES	$	$ 1 632	$ 1 931	$ 1 225
Total unpaid labor		680	551	771
Operator's labor		410	420	391
Family labor		270	131	380
Net income from investment and management		952	1 380	454
RATE EARNED ON INVESTMENT	%	5.18%	8.49%	2.12%
Return to capital and operator's labor and management		1 362	1 800	845
5% of capital invested		919	812	1 072
LABOR AND MANAGEMENT WAGE	$	$ 443	$ 988	$ -227

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$17	2	$7	8
15	1	5	5
13	0	3	7
11	1	1	3
9	5		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms having the highest net incomes, with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The most profitable farms had a smaller total capital investment than either the least profitable farms, or the average of all the farms. Despite the smaller investment, the most profitable farms had higher total receipts and net increases, due to larger sales of feed and grains. They also had lower expenses, as the total farm expense, including the charge for family labor, was $1,383 on the most profitable farms as compared with $1,726 on the least profitable farms.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Inventory Changes in Feed and Grains

	Beginning inventory 1-1-34	Closing inventory 1-12-34	Inventory increases 1934
Average of all farms	$1 117	$1 416	$299
Average of 11 high farms	1 055	1 504	449
Average of 11 low farms	1 061	1 265	204
Your farm			

The difference in the values of feed and grains inventoried was one of the factors influencing the difference in earnings. The most profitable farms had an inventory increase in feed and grains of $449, as compared with an inventory increase of $204 on the least profitable farms. The quantity of hay inventoried was a very important factor influencing the inventory differences.

The average inventory increase for the accounting farms in St. Clair County was $252 in 1934, as compared with $123 in 1933, and a decrease of $580 in 1932. There was an increase of $299 in feed and grains, and decreases of $33 in total livestock, $6 in machinery, and $8 in improvements. The inventory decrease in machinery and improvements was the smallest since 1929 on account keeping farms, and it indicates that needed repairs and replacements are being made but still not enough to offset the current depreciation costs.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 364	$1 331	$-33	$
Feed and grains	1 117	1 416	299	
Machinery	1 174	1 168	-6	
Improvements (except residence)	2 895	2 887	-8	
Total	$6 550	$6 802	$252	$

Some Adjustments on St. Clair County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the reault of changes in their cash incomes. From 1929 through 1933, farm operation costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 99 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,643 a farm in 1934 as compared with $1,074 a farm in 1933. The very low crop yields was a factor causing the large increase in expenditures for feed and grains in 1934. Indications point to an increase of spending in 1935 for repairs and replacements of machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on Accounting Farms in St. Clair County for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 197	$ 445	$	$1 848	$2 672
Feed and grains		470	268		1 039	1 156
Machinery		289	508		68	32
Improvements		158	369		3	4
Labor		129	230		64	42
Miscellaneous		30	24		1	2
Livestock expense		32	31		---	---
Crop expense		186	174		---	---
Taxes		152	206		---	---
Total	$	$1 643	$2 255	$	$3 023	$3 908
Excess of cash sales over expenses				$	$1 380	$1 653
Increase in inventory					252	857
Income to labor and capital (Receipts less expenses)					1 632	2 510

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average total cash income in 1934 was 77 percent of that in 1929, while cash expenses in 1934 were 73 percent as large as in 1929. The relationship of total cash income to total cash expenses is approximately the same in 1934 as it was in 1929. There is, however, considerable difference in the distribution of the expense items. In 1934, expense for livestock was 44 percent, machinery 57 percent, improvements 43 percent, labor 56 percent, and taxes 74 percent of the cash expenditures for these items in 1929. The cash expenditures for feed and grains were much higher in 1934 than in 1929, and miscellaneous expense and crop expenses were practically the same.

Comparison of Farms With High and Low Earnings

The most profitable farms in this study had net receipts per acre of $8.69, as compared with $2.65 for the least profitable group. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The most successful farms averaged 158.9 acres, the least successful 171.2 acres. On the most profitable farms 85 percent of the land area was tillable, as compared with 65 percent tillable on the least profitable farms. The cropping system did not vary a great deal between the two groups. The most profitable farms did, however, have 6.3 acres more of wheat, which was one of the higher yielding crops in 1934. The most profitable farms had an advantage in crop yields. They secured 3 bushels more corn, 2.2 bushels more oats, and 2.4 bushels more wheat than the least profitable farms. The most profitable farms had much larger sales of hay than the least profitable farms.

The most profitable farms were less intensive, but more efficient in their livestock production than the least profitable farms. They had an investment in productive livestock of $4.97 per acre and fed $1,138 of feed per farm as compared with $6.45 invested per acre and $1,578 of feed fed per farm on the least profitable farms. The livestock on the most profitable farms returned $126 for each $100 of feed fed, as compared with a return of $103 for $100 of feed fed on the least profitable farms.

The larger net income on the most profitable farms was secured with a total operating cost of $8.70 per acre, as compared with $10.08 per acre for the least profitable farms. The higher operating cost was an important factor in reducing the net earnings of the least profitable farms. Every item of expense and net decrease except the decrease for horses, and miscellaneous expenses were higher on the least profitable farms. Man labor costs per crop acre were $5.91 on the most profitable farms, as compared with $8.04 on the least profitable farms. Power and machinery costs per crop acre amounted to $3.78 on the most profitable farms, and $4.26 on the least profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should haveresulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	9	$36	10	$190	9	$ 92	$278
1/3 least profitable farms	6	62	7	150	5	123	185
All accounting farms	22	45	26	170	21	93	230

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $78 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 11.4 contracted acres which were used as follows: 3.1 idle; 1.0 red clover; 4.2 sweet clover; .5 soybeans; 1.1 alfalfa; and 1.5 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 32
St. Clair County Farms in 1934

Items	Your farm	Average of 32 farms	11 most profitable farms	11 least profitable farms
Size of farms--acres		164.8	158.9	171.2
Percent of land area tillable		84.8	84.9	65.4
Percent of tillable land in hay and pasture		35.6	32.5	44.3
Gross receipts per acre		15.48	17.39	12.73
Total expenses per acre		9.70	8.70	10.08
Net receipts per acre		5.78	8.69	2.65
Value of land per acre		72	69	80
Total investment per acre		111	102	125
Acres in Corn		29.5	26.8	32.0
Oats		20.0	19.1	21.6
Wheat		35.3	38.7	32.4
Soybeans		.5	1.1	---
Hay		20.1	18.3	19.6
Tillable pasture		29.6	25.7	33.3
Crop yields--Corn, bu. per acre		9.3	11.9	8.9
Oats, bu. per acre		29.7	30.9	28.7
Wheat, bu. per acre		24.3	25.3	22.9
Value of feed fed to productive L.S.		1 332	1 138	1 578
Returns per $100 of feed fed to productive livestock		120	126	103
Returns per $100 invested in:				
Cattle		129	119	128
Poultry		296	308	239
Pigs weaned per litter		6.8	7.0	6.9
Income per litter farrowed		76	75	62
Dairy sales per dairy cow		74	67	71
Investment in productive L.S. per A.		5.72	4.97	6.45
Receipts from productive L.S. per A.		9.68	9.01	9.46
Man labor cost per crop acre		7.01	5.91	8.04
Machinery cost per crop acre		2.06	1.65	2.13
Power and mach. cost per crop A.		4.19	3.78	4.26
Farms with tractor		44%	54%	36%
Value of feed fed to horses		256	216	309
Man labor cost per $100 gross income		30	23	41
Expenses per $100 gross income		63	50	79
Farm improvements cost per acre		.99	.87	.95
Excess of sales over cash expenses		1 380	1 409	1 142
Increase in inventory		252	522	83
Rate earned on investment		5.13%	8.49%	2.12%
Gross receipts per farm		2 551	2 763	2 180

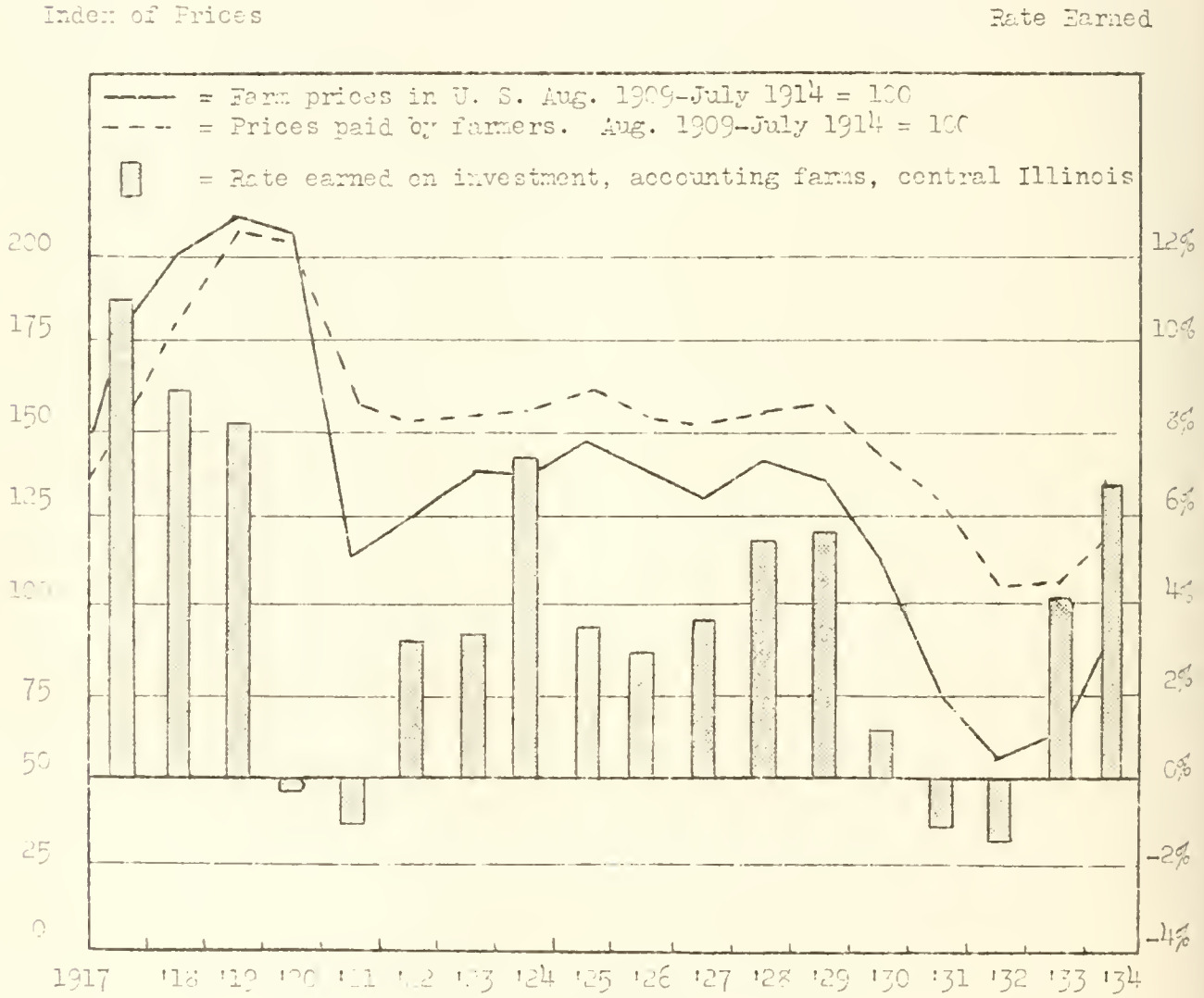
Chart for Studying the Efficiency of Various Parts of Your Business, St. Clair County, 1934

The numbers above the lines across the middle of the page are the averages for the 32 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 Gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
12.68	24	45	39	176	124	546	170	--	1.19	0	2000	2900	40	4500	290
11.18	21	42	36	156	114	496	160	.21	1.79	6	1650	2600	35	4200	265
9.68	18	39	33	136	104	446	150	1.91	2.39	12	1300	2300	30	3800	240
8.18	15	36	30	116	94	396	140	3.61	2.99	18	950	2000	25	3400	215
6.68	12	33	27	96	84	346	130	5.31	3.59	24	600	1700	20	3000	190
5.18	9.3	29.7	24.3	76	74	296	120	7.01	4.19	30	252	1380	15.48	2551	164.8
3.68	6	27	21	56	64	246	110	8.71	4.79	36	-100	1100	10	2200	140
2.18	3	24	18	36	54	196	100	10.41	5.39	42	-450	800	5	1800	115
.68	0	21	15	16	44	146	90	12.11	5.99	48	-800	500	0	1400	90
-.82	--	18	12	--	34	96	80	13.81	6.59	54	-1150	200	--	1000	65
--	--	15	9	--	24	46	70	15.51	7.19	60	-1500	--	--	600	40

Influence of Price Changes on Farm Earnings

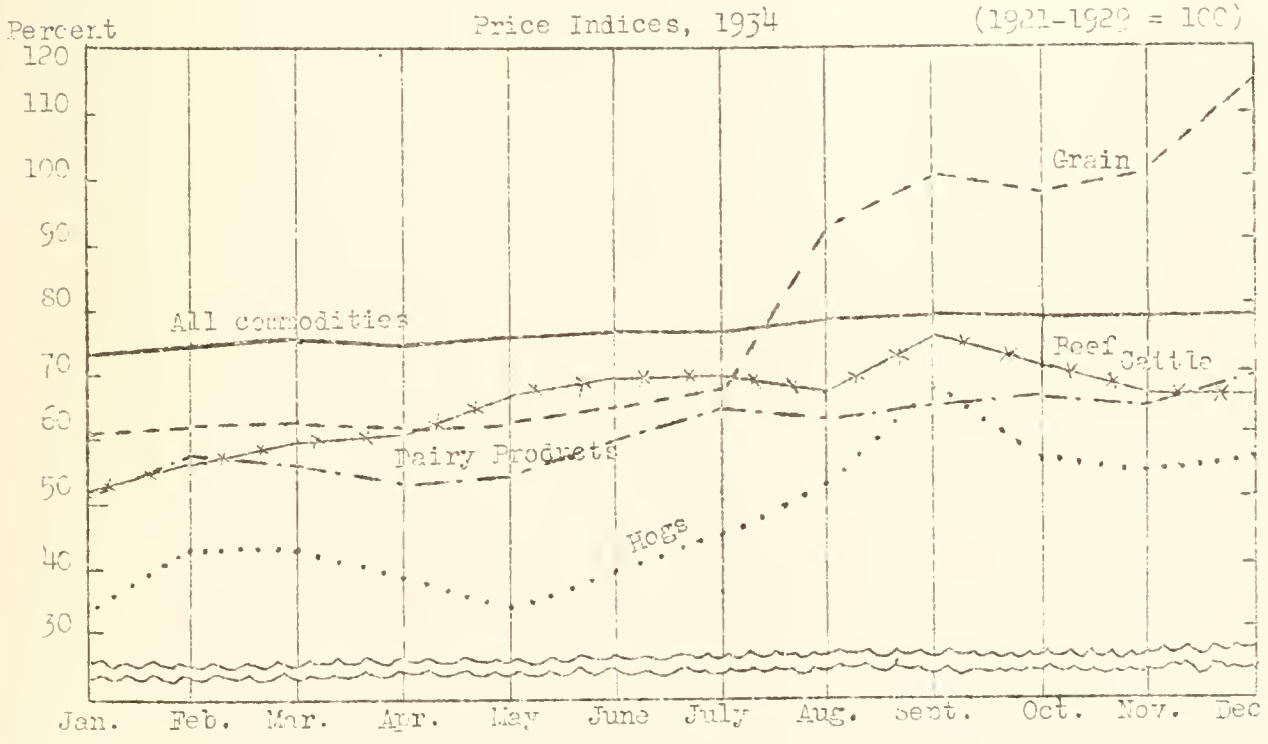
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in St. Clair County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 70 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in St. Clair County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	34	31	30	30	32
Average size of farms, acres	161	163	158.2	182.5	164.8
Average rate earned, to pay for management, risk and capital	.7%	-1.0%	-1.4%	3.8%	5.18%
Average labor and management wage	$-365	$-774	$-826	$165	$443
Gross income per acre	14.68	10.69	8.87	12.53	15.48
Operating cost per acre	13.72	11.97	10.54	8.71	9.70
Average value of land per acre	86	81	79	68	72
Total investment per acre	139	123	121	102	111
Investment per farm in:					
Total livestock	1 949	1 727	1 052	1 293	1 364
Cattle	1 009	852	717	588	622
Hogs	305	277	153	167	171
Poultry	221	188	176	157	126
Gross income per farm	2 359	1 741	1 404	2 287	2 551
Income per farm from:					
Crops	271	282	282	919	868
Miscellaneous income	79	36	53	37	1
Total livestock	2 009	1 423	1 069	1 331	1 618
Cattle	114	80	33	120	163
Dairy sales	894	645	442	516	590
Hogs	484	285	242	347	416
Poultry	510	406	351	337	118
Average yield of corn in bu.	25	37	48	29	9
Average yield of wheat in bu.	20	28	20	20	24

ANNUAL FARM BUSINESS REPORT ON SEVENTY-THREE FARMS IN CLINTON, BOND, MONROE, AND MONTGOMERY COUNTIES, ILLINOIS, 1934

P. E. Johnston, E. L. Sauer, and T. R. Hedges*

The farm earnings of 73 account-keeping farmers in Clinton, Bond, Monroe, and Montgomery Counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 73 accounts show for 1934 an average net income of $1,043 per farm, as compared with an average of $259 in 1933, and an average net loss of $542 in 1932. The average cash income in 1934 was $2,715 per farm, the cash business expenditures $1,500 per farm, leaving a cash balance of $1,215 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $461 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,676 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another, and the wider variations than usual from one farm to another.

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* W. A. Cope, J. H. Brock, C. A. Hughes, and A. E. Snyder, farm advisers in the above Counties, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

The 73 account-keeping farms in Clinton, Bond, Monroe, and Montgomery Counties were divided into two groups, consisting of 38 general farms and 35 dairy farms. The division was made on the basis of the proportion of the gross income received from dairy sales and the number of dairy cows per farm, the factors which normally indicate the relative importance and permanency of the dairy enterprise on the farm.

In the group of 38 general farms, the most successful one-third shows an average net income of $1,761 while the average net income of the least successful one-third was only $373. In the group of 35 dairy farms, the comparable net incomes for the two groups were $1,650, and $418, respectively. In 1933, the most successful one-third of the accounting farms in this area had an average net income of $794, while the least successful one-third had an average net loss of $333.

Investments, Receipts, Expenses and Earnings on 38 General Farms in Clinton, Bond, Monroe, and Montgomery Counties, 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		11 272	9 741	12 609
Farm improvements		2 483	1 816	3 446
Livestock total		1 091	912	1 304
Horses		357	361	378
Cattle		424	262	608
Hogs		161	133	191
Sheep		29	21	38
Poultry		120	135	89
Machinery and equipment		1 057	1 084	824
Feed and grains		1 066	1 154	871
Total capital investment	$	$16 969	$14 707	$19 054
RECEIPTS AND NET INCREASES				
Livestock total		1 090	928	1 259
Horses		---	---	---
Cattle		167	102	247
Hogs (including AAA payments)		401	268	630
Sheep		48	23	75
Poultry		93	91	63
Egg sales		185	183	105
Dairy sales		196	261	139
Feed and grains (including AAA payments)		1 423	2 145	626
Labor off farm		54	84	26
Miscellaneous receipts		4	4	6
Total receipts & net increases	$	$ 2 571	$ 3 161	$ 1 917
EXPENSES AND NET DECREASES				
Farm improvements		130	101	171
Horses		17	11	23
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		234	171	263
Feed and grains		---	---	---
Livestock expense		19	18	23
Crop expense		162	175	144
Hired labor		163	174	174
Taxes		149	170	143
Miscellaneous expenses		23	25	21
Total expenses & net decreases	$	$ 897	$ 845	$ 962
RECEIPTS LESS EXPENSES	$	$ 1 674	$ 2 316	$ 955
Total unpaid labor		612	555	582
Operator's labor		433	434	418
Family labor		179	121	164
Net income from investment and management		1 062	1 761	373
RATE EARNED ON INVESTMENT	%	6.26%	11.97%	1.96%
Return to capital and operator's labor and management		1 495	2 195	790
5% of capital invested		849	735	953
LABOR AND MANAGEMENT WAGE	$	$ 646	$ 1 460	$ -163

The following table, based on all accounting farms, shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$15 and over	2	$3	15
13	3	1	5
11	7	-1	2
9	4	-3	2
7	12	-5	1
5	20		

A further study of the farm businesses, made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes, with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the tables on pages 3 and 5.

In the group of 38 general farms, the most profitable farms averaged 175 acres each, the least profitable 203 acres. The most profitable farms had a larger investment in feed and grains, and in machinery and equipment than the least profitable farms, but a smaller investment in land, improvements and total livestock. The most profitable farms had higher total receipts due to larger sales of feed and grains. The total expense per acre, including the charge for family labor, was slightly higher on the most profitable farms.

In the group of 35 dairy farms, the most profitable farms, although 23 acres smaller than the least profitable farms, had larger investments in feed and grains, machinery and equipment, and total livestock. They had higher total receipts and net increases, due chiefly to larger sales of livestock and livestock products, and of feed and grains. The total expense per acre, including the charge for family labor, was slightly higher on the most profitable farms.

Investments, Receipts, Expenses and Earnings on 35 Dairy Farms in Clinton, Bond, Monroe, and Montgomery Counties, 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
CAPITAL INVESTMENTS				
Land		9 901	9 517	10 610
Farm improvements		2 804	2 432	3 400
Livestock total		1 546	1 738	1 711
Horses		412	446	510
Cattle		831	912	954
Hogs		144	130	116
Sheep		19	14	17
Poultry		140	186	114
Machinery and equipment		1 160	1 363	1 150
Feed and grains		1 002	1 201	864
Total capital investment	$	$16 413	$16 251	$17 735
RECEIPTS AND NET INCREASES				
Livestock total		1 561	1 961	1 202
Horses		27	20	38
Cattle		84	158	---
Hogs (including AAA payments)		331	423	221
Sheep		32	23	12
Poultry		53	63	31
Egg sales		201	258	148
Dairy sales		833	1 016	752
Feed and grains (including AAA payments)		919	1 204	714
Labor off farm		57	66	7
Miscellaneous receipts		3	---	1
Total receipts & net increases	$	$ 2 540	$ 3 231	$ 1 924
EXPENSES AND NET DECREASES				
Farm improvements		165	152	217
Horses		---	---	---
Miscellaneous livestock decreases Cattle		---	---	4
Machinery and equipment		227	257	207
Feed and grains		---	---	---
Livestock expense		16	16	15
Crop expense		155	151	151
Hired labor		143	161	104
Taxes		133	140	135
Miscellaneous expenses		24	22	23
Total expenses & net decreases	$	$ 863	$ 899	$ 856
RECEIPTS LESS EXPENSES	$	$ 1 677	$ 2 332	$ 1 068
Total unpaid labor		654	682	650
Operator's labor		387	405	379
Family labor		267	277	271
Net income from investment and management		1 023	1 650	418
RATE EARNED ON INVESTMENT	%	6.23%	10.15%	2.36%
Return to capital and operator's labor and management		1 410	2 055	797
5% of capital invested		821	813	887
LABOR AND MANAGEMENT WAGE	$	$ 589	$ 1 242	$ -90

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Grain Inventoried on General Farms

	Corn		Wheat	
	Jan. 1, '34	Dec. 31, '34	Jan. 1, '34	Dec. 31, '34
Average of all farms. . . .	668	333	247	313
Average of 13 high farms. .	578	384	410	450
Average of 13 low farms . .	651	199	97	143
Your farm				

Bushels of Grain Inventoried on Dairy Farms

	Corn		Wheat	
	Jan. 1, '34	Dec. 31, '34	Jan. 1, '34	Dec. 31, '34
Average of all farms. . . .	348	217	211	249
Average of 12 high farms. .	393	287	269	302
Average of 12 low farms . .	296	142	158	218
Your farm				

The difference in quantities of grain inventoried was one of the factors influencing the difference in earnings. The most profitable dairy farms had larger inventories of corn and wheat, both at the beginning and at the end of the year, while the most profitable general farms had larger inventories of wheat, both at the beginning and end of the year, and a larger inventory of corn at the end of the year than did the least profitable farms.

The average inventory increase for all accounting farms in Clinton, Bond, Monroe, and Montgomery counties was $461 in 1934, as compared with inventory losses of $1 per farm in 1933, and $680 per farm in 1932. There were increases of $4 in total livestock, $434 in feed and grain, and $67 in machinery, while improvements showed a decrease of $44. Such an increase in inventory as that for machinery results from the value of new replacements and repairs during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes on 73
Clinton, Bond, Monroe, and Montgomery County Farms for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$1 310	$1 314	$ 4	$
Feed and grains	1 035	1 469	434	
Machinery	1 106	1 173	67	
Improvements (except residence)	2 636	2 592	-44	
Total	$6 087	$6 548	$461	$

Some Adjustments on Clinton, Bond, Monroe, and Montgomery County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1933 farm operating costs declined each year, but the year 1934 brought a reversal of this trend. Total operating expenses were 14 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,500 a farm in 1934 as compared with $1,175 in 1933. The largest increase in expenditures over the previous year was for machinery and repairs for machinery. There was also a significant increase in expenditures for livestock, feed, and crop expenses while a decrease was recorded in expenses for taxes. Indications point to an increase of spending in 1935 for repairs and replacement of machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on 73 Accounting Farms in
Clinton, Bond, Monroe, and Montgomery Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 181	$ 189	$	$1 485	$2 963
Feed and grains		328	459		1 075	594
Machinery		390	575		93	119
Improvements		104	281		2	---
Labor		154	180		55	85
Miscellaneous		26	22		5	13
Livestock expense		18	26		---	---
Crop expense		158	178		---	---
Taxes		141	148		---	---
Total	$	$1 500	$2 058	$	$2 715	$3 774
Excess of cash sales over expenses				$	$1 215	$1 716
Increase in inventory					461	344
Income to labor and capital (Receipts less expenses)					1 676	2 060

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can be readily ascertained by a comparison of cash expenditures in 1934 with those in 1929. The average total cash income in 1934 was 72 percent of that of 1929. The total cash expenditures were 73 percent as large as in 1929. In 1929 the average accounting farms in Clinton, Bond, Monroe, and Montgomery Counties spent 55 percent of the cash income for operating expenses; in 1934 they spent 55 percent. The relationship between income and expenses is approximately the same for the two years. There is, however, considerable difference in the distribution of the expense items. In 1934, machinery was 68 percent, feed 71 percent, improvements 37 percent, hired labor 86 percent, and crop expense 89 percent of the cash expenditure for these items in 1929. Taxes and livestock purchases were almost the same in 1934 as in 1929.

Comparison of General Farms With High and Low Earnings

The 13 most profitable general farms in this study had net receipts per acre of $10.08, as compared with $1.84 per acre for the least profitable general farms. The reasons for this difference may be obtained from a study of the data on pages 3 and 12.

The most profitable farms were 28.3 acres smaller than the least profitable farms. However, they had a larger proportion of tillable land, and had 7.9 acres more crops than the least profitable farms. The most profitable farms had about the same acreage of corn and oats as the least profitable group, but they had 27.7 acres more wheat, which was also one of the high yielding crops in 1934. The most profitable farms carried larger inventories of feed and grain on which to make a profit when prices advanced. One reason for the larger inventories was the higher crop yields, there being an advantage of 3.0 bushels of corn, 14.2 bushels of oats, and 3.7 bushels of wheat per acre in favor of the high profit group.

The most profitable farms were not as intensive in their livestock production, but they showed greater efficiency in their livestock feeding operations than the least profitable farms. The most profitable farms had an investment in productive livestock of $3.10 per acre, and fed $774 of feed per farm, as compared with $4.80 invested per acre, and $1,184 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $120 for each $100 of feed fed, as compared with returns of $106 for each $100 of feed fed on the least profitable farms. Dairy sales per dairy cow averaged $59 on the most profitable farms, as compared with $35 on the least profitable group.

The larger income on the most profitable farms was secured with a total operating expense of only 40 cents an acre above that on the least profitable farms. Man labor costs per crop acre was $5.17 on the most profitable farms, as compared with $5.69 on the least profitable farms, while power and machinery cost per crop acre was only $2.88 on the most profitable farms, as compared with $4.43 on the least profitable group.

Comparison of Dairy Farms With High and Low Earnings

The 12 most profitable dairy farms in this study had net receipts per acre of $3.31, as compared with $1.89 per acre for the 12 least profitable dairy farms. The reasons for this difference may be obtained from a study of the data on pages 5 and 14.

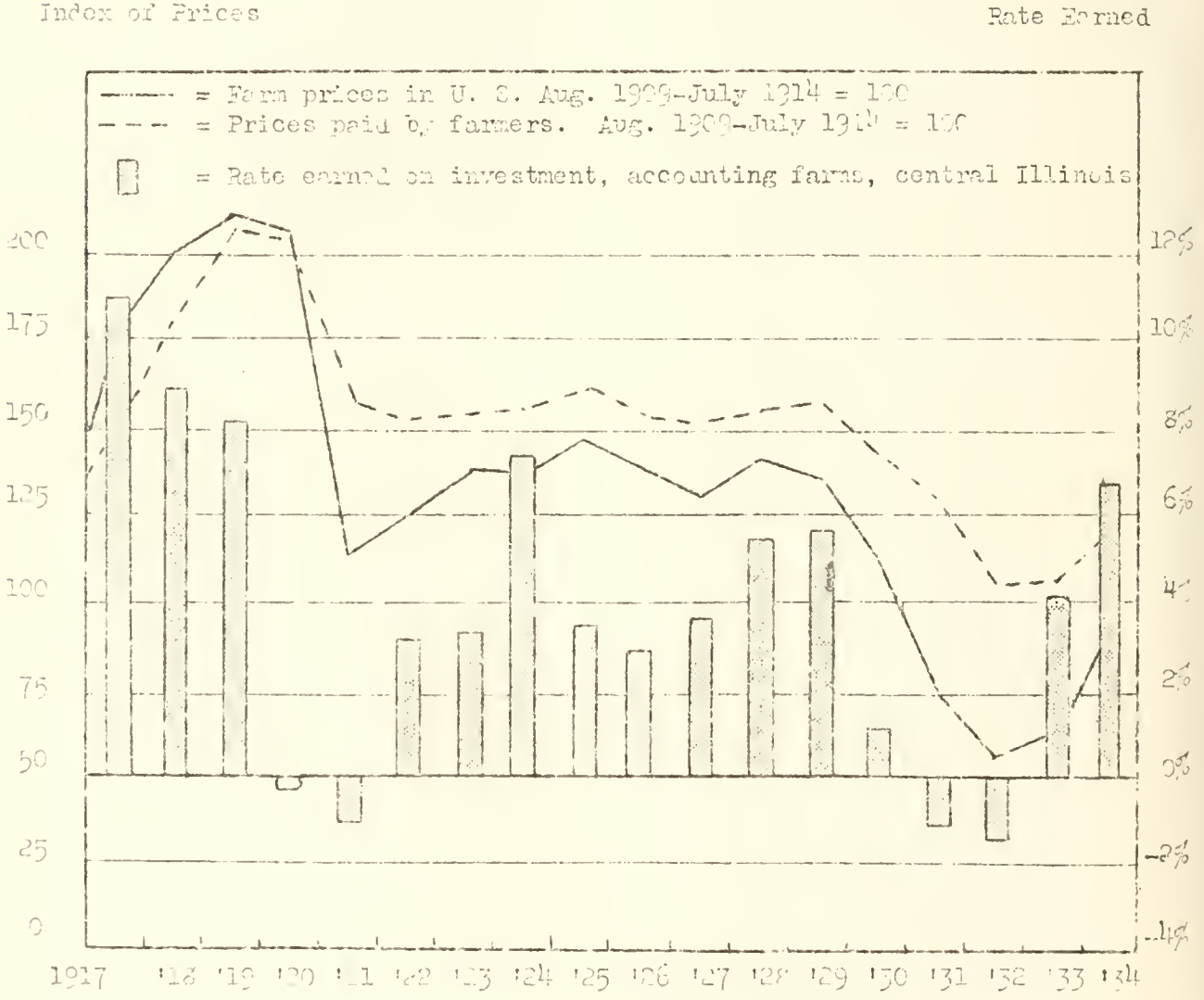
The most profitable farms were more intensive, and more efficient in their livestock production than the least profitable farms. The most profitable farms had an investment in productive livestock of $6.29 per acre, and fed $1,412 of feed per farm, as compared with $5.13 invested per acre, and $1,208 of feed fed per farm, on the least profitable farms. The productive livestock on the most profitable farms returned $137 for each $100 of feed fed, as compared with returns of $96 for each $100 of feed fed on the least profitable farms. Each group had an average of 13.6 dairy cows per farm. The most profitable farms had average dairy sales per dairy cow of $75, as compared with dairy sales of $55 per dairy cow on the least profitable farms. The most profitable farms had an income of $93 per litter farrowed, as compared with $71 for the least profitable group.

The most profitable farms, although having 22.8 fewer total acres, had 7.4 more crop acres than the least profitable farms. They had 6.1 acres more corn, 5.6 acres more oats, and 8.7 acres more wheat than the least profitable farms. Wheat and soybeans were the high yielding crops in 1934. The most profitable farms had slightly higher crop yields. Because of the larger crop acreage and the higher yields, the most profitable farms had larger inventories of feed and grain on which to make a profit when prices advanced.

The total operating cost per acre, including the charge for family labor, was somewhat higher on the most profitable farms. Man labor cost was 13 cents per crop acre higher, and power and machinery cost was 44 cents per crop acre higher than on the least profitable farms. However, in proportion to income, costs were much lower on the most profitable farms. Their total expenses per $100 gross income was $48, as compared with $75 on the least profitable farms.

Influence of Price Changes on Farm Earnings

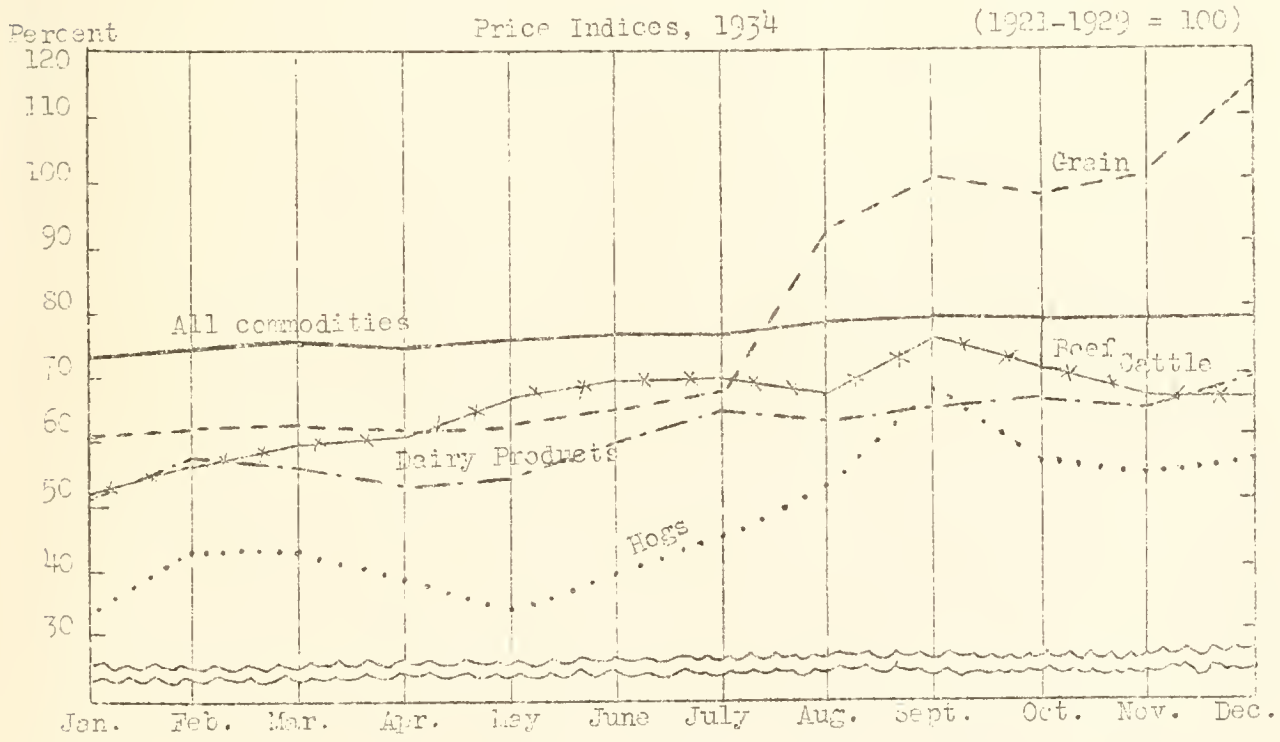
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $5.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.30. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Factors Helping to Analyze the Farm Business on 38 General Farms in Clinton, Bond, Monroe, and Montgomery Counties, 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		195.9	174.7	203.0
Percent of land area tillable		83.7	92.6	78.9
Percent of tillable land in hay and pasture		33.3	26.5	38.7
Gross receipts per acre		$ 13.39	$ 18.09	$ 9.44
Total expenses per acre		7.71	8.01	7.61
Net receipts per acre		5.41	10.08	1.84
Value of land per acre		58	56	62
Total investment per acre		87	84	94
Acres in Corn		33.7	35.4	35.7
Oats		20.0	17.7	19.6
Wheat		43.2	56.4	28.7
Hay		23.6	17.5	30 3
Tillable pasture		31.0	25.5	31.7
Crop yields--Corn, bu. per acre		15.5	15.4	12.4
Oats, bu. per acre		21.0	31.1	16.9
Wheat, bu. per acre		26.4	29.0	25.7
Value of feed fed to productive L.S.		958	774	1 134
Returns per $100 of feed fed to productive livestock		114	120	106
Returns per $100 invested in:				
Cattle		83	132	65
Poultry		232	208	187
Pigs weaned per litter		6.0	6.0	6.2
Income per litter farrowed		75	68	77
Dairy sales per dairy cow		45	59	35
Investment in productive L.S. per A.		3.87	3.10	4.30
Receipts from productive L.S. per A.		5.56	5.31	6.20
Man labor cost per crop acre		5.43	5.07	5.69
Machinery cost per crop acre		1.76	1.25	2 05
Power and mach. cost per crop A.		3.57	2.88	4.03
Farms with tractor		66%	62%	46%
Value of feed fed to horses		224	211	231
Man labor cost per $100 gross income		28	22	38
Expenses per $100 gross income		58	44	31
Farm improvements cost per acre		.66	.58	.84
Excess of sales over cash expenses		1 145	1 544	667
Increase in inventory		529	772	288
Rate earned on investment		6.26%	11.97%	1.96%
Gross receipts per farm		2 571	3 161	1 917

Chart for Studying the Efficiency of Various Parts of Your Business, Clinton, Bond, Monroe, and Montgomery Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 38 general farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre: Corn	Bushels per acre: Oats	Bushels per acre: Wheat	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	U.S. income per $100 of feed fed	Cost per crop acre: Labor	Cost per crop acre: Power and machinery	Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts: Per acre	Gross receipts: Per farm	Acres in farm
13.8	30	41	41	125	85	432	188	.43	.60	--	1500	2600	23	5100	400
12.3	27	37	38	113	77	392	174	1.43	1.20	4	1300	2300	21	4600	360
10.8	24	33	35	105	69	362	159	2.43	1.80	10	1100	2000	19	4100	320
9.3	21	29	32	95	61	312	144	3.43	2.40	16	900	1700	17	3600	280
7.8	18	25	29	85	53	272	129	4.43	3.00	22	700	1400	15	3100	240
6.26	15.5	21.0	26.4	75	45	232	114	5.43	3.57	28	529	1145	13.39	2571	196
4.8	12	17	23	65	37	192	99	6.43	4.20	34	300	800	11	2100	160
3.3	9	13	20	55	29	152	84	7.43	4.80	40	100	500	9	1600	120
1.8	6	9	17	45	21	112	69	8.43	5.40	46	-100	200	7	1100	80
.3	3	5	14	35	13	72	54	9.43	6.00	52	-300	-100	5	600	40
-1.2	0	1	11	25	5	32	39	10.43	6.60	58	-500	-400	3	100	0

Factors Helping to Analyze the Farm Business on 35 Dairy Farms in Clinton, Bond, Monroe, and Montgomery Counties, 1934

Items	Your farm	Average of 35 farms	12 most profitable farms	12 least profitable farms
Size of farms--acres		205.2	198.4	221.2
Percent of land area tillable		83.96	85.9	84.1
Percent of tillable land in hay and pasture		42.7	36.7	50.1
Gross receipts per acre		$ 12.38	$ 16.28	$ 8.70
Total expenses per acre		7.39	7.97	6.81
Net receipts per acre		4.99	8.31	1.89
Value of land per acre		48	48	48
Total investment per acre		80	82	80
Acres in Corn		20.7	24.6	18.5
Oats		22.9	25.3	19.7
Wheat		34.7	38.5	29.8
Hay		31.5	26.7	34.5
Tillable pasture		42.0	35.8	58.7
Crop yields--Corn, bu. per acre		18.1	18.1	17.7
Oats, bu. per acre		18.4	21.1	12.8
Wheat, bu. per acre		22.3	23.4	22.5
Value of feed fed to productive L.S.		1 304	1 412	1 208
Returns per $100 of feed fed to productive livestock		118	137	96
Returns per $100 invested in:				
Cattle		113	129	83
Poultry		184	179	157
Pigs weaned per litter		6.5	6.7	6.1
Income per litter farrowed		88	98	71
Dairy sales per dairy cow		64	75	55
Number of dairy cows		13.0	13.6	13.6
Investment in productive L.S. per A.		5.35	6.29	5 13
Receipts from productive L.S. per A.		7.48	9.78	5.24
Man labor cost per crop acre		5.63	6.00	5.87
Machinery cost per crop acre		1.74	1.91	1.63
Power and mach. cost per crop A.		3.72	4.05	3.61
Farms with tractor		54%	58%	25%
Value of feed fed to horses		285	308	291
Man labor cost per $100 gross income		28	25	37
Expenses per $100 gross income		60	48	75
Farm improvements cost per acre		.80	.77	.93
Excess of sales over cash expenses		1 291	1 733	933
Increase in inventory		386	599	135
Rate earned on investment		6.23%	10.15%	2.36%
Gross receipts per farm		2 540	3 231	1 324

Chart for Studying the Efficiency of Various Parts of Your Business, Clinton, Bond, Monroe, and Montgomery Counties, 1934

The numbers above the lines across the middle of the page are the averages for the 35 dairy farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre		Number of dairy cows	Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Wheat						Labor	Power and machinery				Per acre	Per farm	
13.7	33	37	23	138	114	334	178	.68	[illegible]	3	1400	2800	22	4500	355
12.2	30	34	21	128	104	304	166	1.68	.72	8	1200	2500	20	4100	325
10.7	27	31	19	118	94	274	154	2.68	1.47	13	1000	2200	18	3700	295
9.2	24	28	17	108	84	244	142	3.68	2.22	18	800	1900	16	3300	265
7.7	21	25	15	98	74	214	130	4.68	2.97	23	600	1600	14	2900	235
6.23	18.1	22.3	13	88	64	184	118	5.68	3.72	28	386	1291	12.38	2540	205
4.7	15	19	11	78	54	154	106	6.68	4.47	33	200	1000	10	2100	175
3.2	12	16	9	68	44	124	94	7.68	5.22	38	0	700	8	1700	145
1.7	9	13	7	58	34	94	82	8.68	5.97	43	-200	400	6	1300	115
.2	6	10	5	48	24	64	70	9.68	6.72	48	-400	100	4	900	85
-1.3	3	7	3	38	14	34	58	10.68	7.47	53	-600	-200	2	500	55

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms was under one or both contracts in 1934. The acreages of corn and wheat on these farms were, therefore, less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received on 73 Accounting Farms
in Clinton, Bond, Monroe, and Montgomery Counties for 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	18	$55	20	$163	17	$73	$220
1/3 least profitable farms	22	57	17	134	21	85	214
All accounting farms	60	54	55	140	56	71	205

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $54 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 16.4 contracted acres which were used as follows: 5.2 idle; 2.4 red clover; 4.1 sweet clover; 1.9 soybeans; 1.6 alfalfa; and 1.2 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Clinton, Bond, Monroe, and Montgomery Counties for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five, and were 82 percent of the 1929 gross receipts. Operating costs per acre were lower than in any year of the five except 1933. Thus profits were the best the county had experienced since 1928.

Earnings in 1935, as usual, will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on all Accounting Farms in Clinton, Bond, Monroe, and Montgomery Counties for 1930-1934

Items	1930 1/	1931 1/	1932 1/	1933 2/	1934
Number of farms	36	31	30	34	73
Average size of farms, acres	173	170	166	194	200
Average rate earned, to pay for management, risk and capital	1.8%	0.2%	-3.1%	1.5%	6.24%
Average labor and management wage	$-47	$-428	$-1 004	$-239	$619
Gross income per acre	14.64	9.94	5.91	8.72	11.72
Operating cost per acre	12.54	9.76	9.17	7.38	7.52
Average value of land per acre	67	64	62	55	53
Total investment per acre	116	108	104	91	83
Investment per farm in:					
Total livestock	2 252	1 863	1 662	1 607	1 310
Cattle	1 228	1 024	902	832	619
Hogs	287	142	108	149	153
Poultry	282	271	255	196	130
Gross income per farm	2 539	1 688	982	1 692	2 549
Income per farm from:					
Crops	---	331	28	443	1 181
Miscellaneous income	91	96	67	44	5
Total livestock	2 448	1 261	887	1 205	1 208
Cattle	157	30	---	105	127
Dairy sales	1 304	734	513	540	502
Hogs	489	164	109	320	367
Poultry	496	325	262	206	74
Average yield of corn in bu.	18	35	40	15	17
Average yield of wheat in bu.	21	21	22	17	25

1/ Records from Clinton County included for 1930-1932.
2/ Records from Clinton, Bond, and Washington Counties included for 1933.

ANNUAL FARM BUSINESS REPORT ON THIRTY-EIGHT FARMS IN EFFINGHAM COUNTY, ILLINOIS, 1934

P. E. Johnston, T. R. Hedges, and J. B. Andrews*

The farm earnings of 38 account-keeping farmers in Effingham County showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 38 accounts show for 1934 an average net income of $1,029 per farm, as compared with an average of $338 in 1933 and an average net loss of $442 in 1932. The average cash income in 1934 was $1,861 per farm, the cash business expenditures $900 per farm, leaving a cash balance of $961 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income there was an inventory increase of $666 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,627 per farm. The inventory increase was a much smaller part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933 in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats, which accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted; which accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

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*Mr. V. D. Evans, farm adviser in Effingham County, cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

In this group of 38 accounting farms the most successful third shows an average net income of $1860, the average net income of the least successful third of the farms was only $274. Figured on a cash basis the more successful farms had on the average 131 percent more cash income left to meet interest payments and family living expenses than did the least successful farms. In 1933 the comparable net incomes for the two groups was $777 and $-126 respectively.

Investments, Receipts, Expenses and Earnings on
38 Effingham County Farms in 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
CAPITAL INVESTMENTS				
Land		7 599	7 756	7 594
Farm improvements		1 893	1 996	1 804
Livestock total		1 291	1 510	1 121
Horses		327	393	303
Cattle		708	848	592
Hogs		92	105	97
Sheep		32	29	16
Poultry		132	135	113
Machinery and equipment		930	864	902
Feed and grain		939	1 199	755
Total capital investment	$	$12 652	$13 325	$12 176
RECEIPTS AND NET INCREASES				
Livestock total		1 221	1 538	878
Horses		31	42	7
Cattle		209	316	112
Hogs (including AAA payments)		256	335	195
Sheep		41	44	8
Poultry		101	112	95
Egg sales		186	205	140
Dairy sales		397	424	321
Feed and grains (including AAA payments)		868	1 394	544
Labor off farm		78	90	63
Miscellaneous receipts		2	1	5
Total receipts & net increases	$	$2 169	$3 023	$1 490
EXPENSES AND NET DECREASES				
Farm improvements		114	110	138
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		136	130	156
Feed and grain		---	---	---
Livestock expense		19	21	17
Crop expense		83	89	77
Hired labor		57	83	24
Taxes		105	122	97
Miscellaneous expenses		28	27	32
Total expenses & net decreases	$	$ 542	$ 582	$ 541
RECEIPTS LESS EXPENSES	$	$1 627	$2 441	$ 949
Total unpaid labor		598	581	675
Operator's labor		407	420	389
Family labor		191	161	286
Net income from investment and management		1 029	1 860	274
RATE EARNED ON INVESTMENT	%	8.13%	13.96%	2.25%
Return to capital and operator's labor and management		1 436	2 280	663
5% of capital invested		632	666	609
LABOR AND MANAGEMENT WAGE	$	$ 804	$1 614	$ 54

The following table shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$13.	2	$3.	7
11.	5	1.	5
9.	1	-1.	1
7.	3	-3.	1
5.	13		

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes with those having the lowest should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on page 3.

The total investment on the most profitable farms averaged $13,325, as compared with a total investment of $12,176 on the least profitable farms. The two groups had about the same amount invested in land and improvements but the most profitable farms had a larger investment in productive livestock, and feed and grain. A difference of $855 in the sale and inventory of feed and grain, accounts for much of the difference in income between the two groups. The total expense, including the charge for family labor was $1,163 on the most profitable farms, as compared with $1,216 on the least profitable group.

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Corn Inventoried

	Jan. 1, 1934	Dec. 31, 1934
Average of all farms.	693	598
Average of 13 most successful farms . .	1 062	877
Average of 13 least successful farms. .	392	356
Your farm		

The most profitable farms had a much larger inventory of corn both at the beginning and end of the year; which accounts in part for the difference in farm earnings.

The average inventory increase for the accounting farms in Effingham County was $666 in 1934, as compared with $140 in 1933 and an inventory loss of $372 a farm in 1932. There were increases of $136 in total livestock, $558 in feed and grain, and $9 in machinery, while improvements showed a decrease of $37. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of depreciation costs. This increase is of considerable interest for it is the first time that such an increase in machinery inventories has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes your farm
Total livestock	$1 291	$1 427	$136	$
Feed and grains	939	1 497	558	
Machinery	930	939	9	
Improvements (except residence)	1 893	1 856	-37	
Total	$5 053	$5 719	$666	$

Some Adjustments on Effingham County Farms Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash incomes. From 1929 through 1934 farm operating costs declined each year. Total operating expenses were 3 cents an acre less in 1934 than in 1933, while cash operating expenses were $900 a farm in 1934 as compared with $724 in 1933. The largest increase in expenditures over the previous year was for machinery and supplies for machinery. Indications point to an even greater expansion of spending for these items in 1935 since farmers have postponed machinery replacements during the four-year period since 1929.

Cash Income and Expenses on Accounting Farms in Effingham County 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 104	$ 151	$	$1 189	$1 575
Feed and grains		186	382		496	442
Machinery		241	321		96	122
Improvements		77	138		---	4
Labor		57	119		78	75
Miscellaneous		28	22		2	4
Livestock expense		19	9		---	---
Crop expense		83	99		---	---
Taxes		105	125			
Total	$	$ 900	$1 366	$	$1 361	$2 222
Excess of cash sales over expenses				$	$ 961	$ 856
Increase in inventory					666	530
Income to labor and capital (Receipts less expenses)					1 627	1 386

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although average cash income in 1934 was 84 percent of that in 1929, cash expenditures were only 66 percent as large. In 1934 livestock purchases were 69 percent, and feed and grain purchases 49 percent as large as in 1929. In 1934 these farms paid out 75 percent as much for machinery and 84 percent as much for crop expense as in 1929, while taxes were reduced to 84 percent of the 1929 level.

Comparison of Farms With High and Low Earnings

After deducting total expenses and net decreases, from income and net increases there remained a net increase of $8.80 per acre for the most profitable farms, as compared with $1.24 per acre for the less profitable group. For the first group this was a return of 13.96 percent on the capital invested in the business, and for the second group 2.25 percent. The reasons for this difference may be obtained from a study of the data on pages 3 and 8.

The size of the most profitable farms was 211 acres, as compared with 222 for the least profitable. However, the most profitable farms had 12 percent more tillable land and 15 more crop acres per farm than the least profitable farms. The most profitable farms carried larger inventories in feed and grain, and productive livestock on which to make a profit when prices advanced. The cropping system was practically the same for the two groups. There was, however, considerable difference in the crop yields. The most profitable farms grew 10.6 bushels more corn, 5.4 bushels more oats and 3 bushels more wheat per acre than did the least profitable farms. The larger crop production and the increase in grain prices accounted for the fact that the closing inventory of feed and grain was $906 per farm higher than the beginning inventory while on the less profitable farms it was only $376 higher.

The total investment in productive livestock was $5.60 per acre on the most profitable farms as compared with $3.65 on the least profitable farms. The receipts from productive livestock were $7.07 and $3.93 per acre respectively. The difference in livestock efficiency is further illustrated by the fact that the returns per $100 of feed fed were $146 for the most profitable farms as compared with $105 for the less profitable farms.

The total operating expenses of the two groups of farms showed but little difference. The total operating expense per acre for the most profitable group was $5.50 as compared with $5.48 for the least profitable group. The cost of power and machinery was 48 cents per crop acre lower while man labor costs were $1.02 per crop acre lower, for the most profitable farms.

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A larger percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable farms	12	$62	6	$52	11	$48	$122
1/3 least profitable farms	9	58	9	49	8	43	100
All accounting farms	30	52	23	46	26	47	101

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay the year's taxes. As an average of all accounting farms, the payments actually received were sufficient to pay 96 percent of the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. On the most profitable farms 5.7 acres were idle, 4.4 were in crops. On the least profitable farms 12.2 acres were idle and 5.9 were in crops. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Factors Helping to Analyze the Farm Business on 38 Effingham County Farms in 1934

Items	Your farm	Average of 38 farms	13 most profitable farms	13 least profitable farms
Size of farms--acres		210.8	211.4	221.7
Percent of land area tillable		84	86.4	73.6
Percent of tillable land in hay and pasture		50.1	47	48.9
Gross receipts per acre		10.29	14.30	6.72
Total expenses per acre		5.41	5.50	5.48
Net receipts per acre		4.88	8.80	1.24
Value of land per acre		36	37	34
Total investment per acre		60	63	55
Acres in Corn		32.3	34.9	30.5
Oats		19.5	20.4	19.4
Wheat		17.7	20.3	16.8
Soybeans		10.6	16.4	6.2
Hay		37.7	37.1	36.2
Tillable pasture		51	48.7	43.5
Crop yields--Corn, bu. per acre		25.4	29.7	19.1
Oats, bu. per acre		7.5	11	5.6
Wheat, bu. per acre		17.2	18.5	15.5
Value of feed fed to productive L.S.		910	1 025	831
Returns per $100 of feed fed to productive livestock		131	146	105
Returns per $100 invested in:				
Cattle		83	92	73
Poultry		219	233	214
Pigs weaned per litter		6.4	6	6.5
Income per litter farrowed		90	114	72
Dairy sales per dairy cow		48	54	40
Investment in productive L.S. per A.		4.76	5.60	3.65
Receipts from productive L.S. per A.		5.65	7.07	3.93
Man labor cost per crop acre		4.90	4.61	5.63
Machinery cost per crop acre		1.08	.97	1.30
Power and mach. cost per crop A.		2.17	1.93	2.41
Farms with tractor		52%	62%	46%
Value of feed fed to horses		169	171	139
Man labor cost per $100 gross income		28	20	45
Expenses per $100 gross income		53	38	82
Farm improvements cost per acre		.54	.52	.62
Excess of sales over cash expenses		961	1 344	581
Increase in inventory		666	1 097	368
Rate earned on investment		8.13	13.96	2.25
Gross receipts per farm		2 169	3 023	1 490

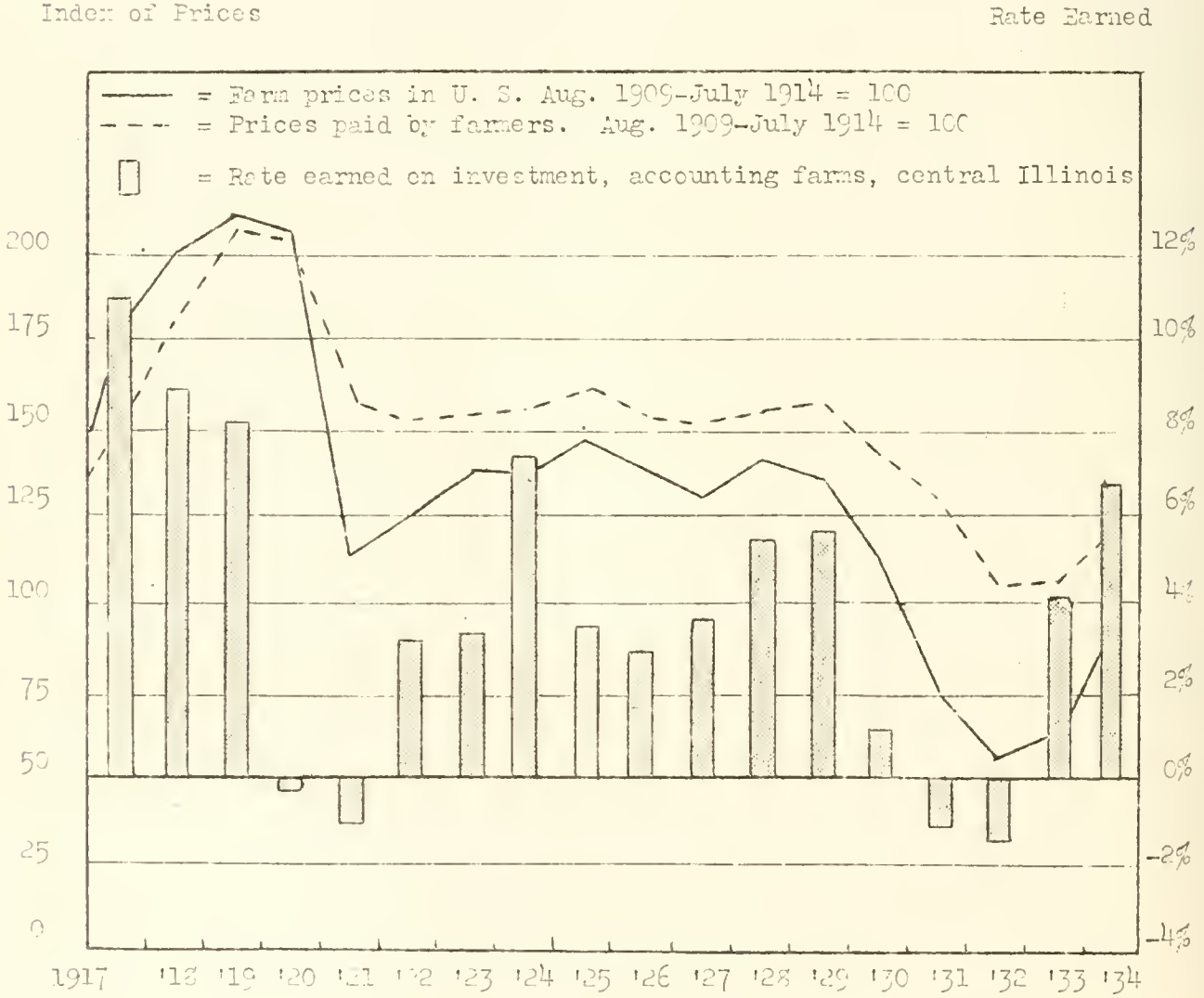
Chart for Studying the Efficiency of Various Parts of Your Business, Effingham County, 1934

The numbers above the lines across the middle of the page are the averages for the 38 farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
18.13	45	22	27	240	68	469	231	--	--	--	2166	1960	17.80	3770	361
16.13	41	19	25	210	64	419	211	.90	.17	--	1866	1760	16.30	3470	331
14.13	37	16	23	180	60	369	191	1.90	.67	--	1566	1560	14.80	3170	301
12.13	33	13	21	150	56	319	171	2.90	1.17	8	1266	1360	13.30	2770	271
10.13	29	10	19	120	52	269	151	3.90	1.67	18	966	1160	11.80	2470	241
8.13	25.4	7.5	17.2	90	48	219	131	4.90	2.17	28	666	961	10.29	2169	211
6.13	21	4	15	60	44	169	111	5.90	2.67	38	366	760	8.80	1870	181
4.13	17	1	13	30	40	119	91	6.90	3.17	48	66	560	7.30	1570	151
2.13	13	--	11	0	36	69	71	7.90	3.67	58	-234	360	5.80	1270	121
.13	9	--	9	--	32	19	51	8.90	4.17	68	-534	160	5.30	970	91
-2.13	5	--	7	--	28	--	31	9.90	4.67	78	-834	-40	3.80	670	61

Influence of Price Changes on Farm Earnings

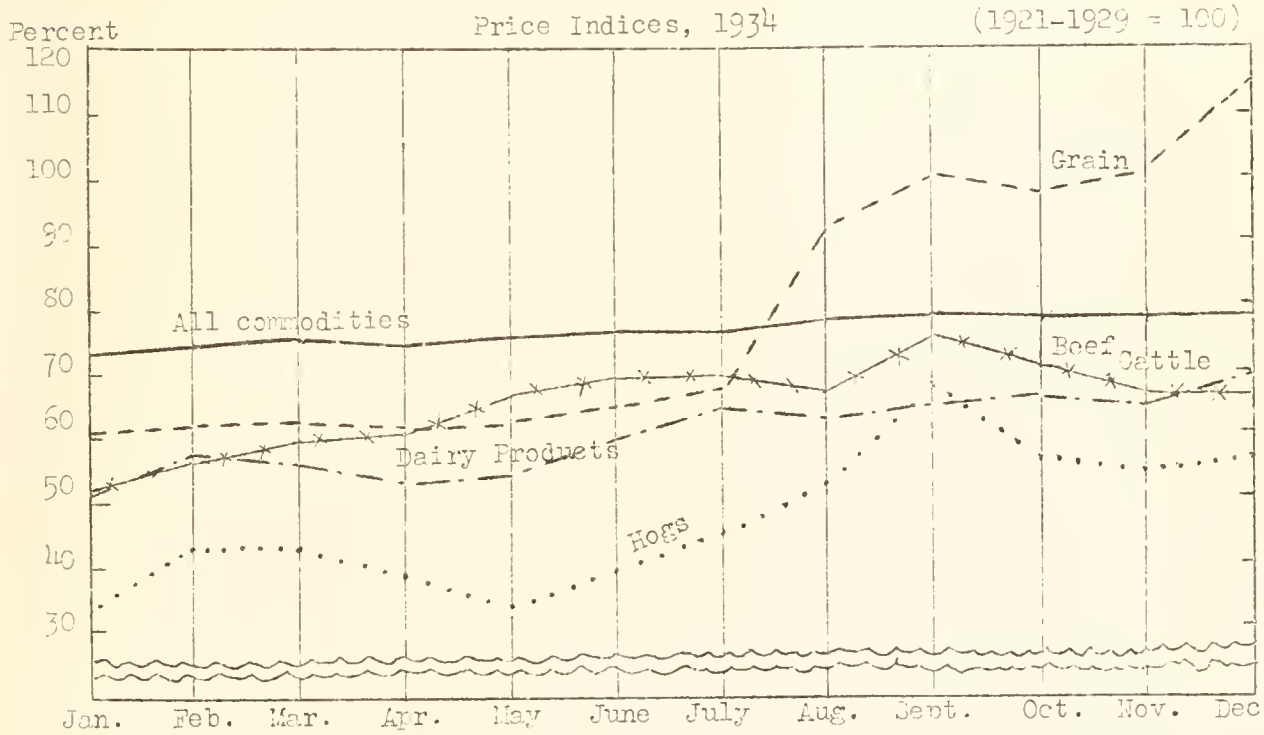
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Variation in Earnings Over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Effingham County for the last five years is very interesting because of the violent changes in price level. 1934 was the second year of very low crop yields, yet total receipts per farm were higher than in any other year in the last five. Operating costs per acre were lower than in any year of the five. Thus profits were the best the county had experienced since 1928.

Earnings in 1935 as usual will depend upon individual efficiency, weather and prices. A normal year will mean larger yields of grain and probably lower prices.

Comparison of Earnings and Investments on Accounting Farms in Effingham County for 1930-1934

Items	1930	1931	1932	1933	1934
Number of farms	32	35	34	32	38
Average size of farms, acres	189	196	199	194	211
Average rate earned, to pay for management, risk and capital	0.2%	-0.1%	-3.5%	2.8%	8.13%
Average labor and management wage	$-61	$-186	$-659	$133	$804
Gross income per acre	7.44	6.18	3.96	7.18	10.29
Operating cost per acre	7.32	6.21	6.19	5.44	5.41
Average value of land per acre	40	40	37	36	36
Total investment per acre	68	67	64	62	60
Investment per farm in:					
Total livestock	1 741	1 506	1 345	1 312	1 291
Cattle	957	819	734	741	708
Hogs	116	107	96	74	92
Poultry	269	211	183	167	132
Gross income per farm	1 406	1 210	786	1 394	2 169
Income per farm from:					
Crops	62	214	---	396	868
Miscellaneous income	48	72	48	56	2
Total livestock	1 296	924	738	942	1 221
Cattle	141	82	95	172	209
Dairy sales	410	330	252	272	397
Hogs	238	132	123	189	256
Poultry	494	363	260	276	101
Average yield of corn in bu.	14	34	34	22	25
Average yield of wheat in bu.	13	27	13	13	18

ANNUAL FARM BUSINESS REPORT ON EIGHTY-THREE FARMS IN JEFFERSON, EDWARDS, WABASH, JACKSON, MARION, WHITE, SALINE, CRAWFORD, RICHLAND, CLAY, WASHINGTON, WAYNE, AND JOHNSON COUNTIES, ILLINOIS, 1934

P. E. Johnston, J. B. Andrews, and E. L. Sauer*

The farm earnings of 83 account-keeping farmers in the above counties showed an increase in 1934 over those of 1933. This is the second consecutive year of improvement in the business of these farms. The three years previous to 1933 showed very low returns.

These 83 accounts show for 1934 an average net income of $1,194 per farm, as compared with an average of $353 in 1933, and an average net loss of $412 in 1932. The average cash income in 1934 was $2,078 per farm, the cash business expenditures $1,007 per farm, leaving a cash balance of $1,071 to meet interest payments and family living expenses. (Those who keep home account books use the latter figure to represent the cash contribution of the farm to the "realized family income".) Besides the cash income, there was an inventory increase of $680 per farm due to the rise in the prices of farm products. This increase, added to the cash balance, resulted in an average excess of receipts over expenses of $1,751 per farm. The inventory increase was a larger part of the total farm income in 1934 than in 1933.

These data must not be considered representative of average farm conditions, for they were secured from farms which are larger than average, and which were managed by farmers who are more efficient than the average of all farmers in the county.

For the state as a whole, farm earnings were better in 1934 than in 1933, in spite of the fact that corn and oat yields were very low due to the drouth and to chinch bug damage. In the western and southwestern parts of the state the drouth caused an almost total failure of both corn and oats. This accounts for farm earnings being lower there than in other parts of the state.

The corn crop was best in the southeastern part of the state, and was fair in the northwestern section. Wheat yields were particularly good in the south and central portions of the state. Soybean yields were very good throughout the state, and there was a larger than normal acreage in Illinois in 1934. This state produced over half of the nation's 1934 crop of soybeans.

Chinch bug damage extended over most of the state last year, but was much more severe in some sections than in others, and was much worse on some farms than on other farms in the same community. Conditions affecting crop yields were very spotted. This accounts in part for the wide variation in farm earnings from one section of the state to another and the wider variations than usual from one farm to another.

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*C. E. Twigg, W. D. Murphy, H. H. Lett, J. G. McCall, F. J. Blackburn, R. H. Clanahan, L. J. Fultz, H. Allison, C. L. Beatty, J. Q. Scott, L. R. Caldwell, E. S. Amrine, and W. E. Gould, farm advisers in the above Counties cooperated in supervising and collecting the records on which this report is based.

Industries other than agriculture again showed improved earnings over the previous year. A group of 840 industrial corporations reported by a nationally known bank showed average earnings of 5.0 percent on their invested capital in 1934, as compared with 3.4 percent for the same corporations in 1933. A similar group had a loss of one-tenth of one percent in 1932, and average earnings of 3.3 percent in 1931.

In comparing the average earnings of corporations with the rate earned on investment on accounting farms, it is well to keep in mind that in corporation accounting, charges are made for management, while in the farm accounts no comparable deduction has been made. On the other hand the farmer and his family receive food, fuel, and other items of living from the farm for which the farm has received no credit in the records used in this report. For the average central Illinois farm family, consisting of five persons, the value of the food and fuel furnished by the farm was about $250 in 1934, when estimated on the basis of the wholesale price for farm products.

Variations in Farm Incomes

There was a much wider range in farm earnings on the accounting farms in 1934 than in 1933. This was true for the farms included in this report, and it was also true when the average earnings of farms in one section of the state are compared with the earnings of farms in other areas.

The extremely wide range in earnings was due to a combination of physical and economic factors. The average yields of wheat and soybeans were much better, compared with the five-year average, than the average yields of corn and oats. This variation favored those sections which had larger acreages of the higher yielding crops in 1934. There was also a wide range in average corn yields from one section of the state to another, as well as between individual farms in the same area. The price of grains was high in 1934 as compared with prices of livestock and livestock products. Farms where grain sales constitute a large part of the farm income thus had an advantage. The rapid increase in the prices of farm products, particularly grains, favored those farms which had large stocks of salable products on hand at the beginning of the year. Many farmers who inventoried the corn on hand at the beginning of 1934 at 40 cents a bushel, later sold this corn for 80 cents.

The 83 account-keeping farms in this report were divided into the three following groups: 56 farms on the lower-valued land, 17 farms on the higher-valued land, and 10 dairy farms. The 56 farms on the lower-valued land were further divided to permit the usual comparative analysis between the most profitable farms and the least profitable farms. The group of 56 farms averaged 184 acres in size and had an average land value of $32 per acre. They received approximately one-half of their gross income from feed and grains and one-half from livestock and livestock products. The group of 17 farms averaged 234 acres in size and had an average land value of $56 per acre. They received 65 percent of their gross income from feed and grains and 34 percent from livestock and livestock products. The 10 dairy farms were selected on the basis of the number of dairy cows per farm, and the proportion of the gross income received from dairy sales, the factors which usually indicate the relative importance and permanency of the dairy enterprise on the farm. The 83 farms were divided into the above groups in order to give the account cooperators in Southern Illinois a better analysis of their farm business. Such a division permits the comparison of the individual farm business with the averages of farms of similar type and organization.

Investments, Receipts, Expenses and Earnings on 56
Southern Illinois Farms on Lower-Valued Land in 1934

Items	Your farm	Average of 56 farms	19 most profitable farms	19 least profitable farms
CAPITAL INVESTMENTS				
Land		5 970	5 707	4 851
Farm improvements		1 538	1 598	1 272
Livestock total		901	960	731
Horses		313	329	243
Cattle		340	358	291
Hogs		110	125	64
Sheep		41	41	51
Poultry		97	107	82
Machinery and equipment		631	554	665
Feed and grains		743	867	483
Total capital investment	$	$9 783	$9 686	$8 002
RECEIPTS AND NET INCREASES				
Livestock total		894	1 092	613
Horses		32	38	27
Cattle		121	179	41
Hogs (including AAA payments)		310	394	176
Sheep		41	48	43
Poultry		78	80	63
Egg sales		180	231	123
Dairy sales		132	122	140
Feed and grains (including AAA payments)		894	1 259	461
Labor off farm		60	79	57
Miscellaneous receipts		4	2	8
Total receipts & net increases	$	$1 852	$2 432	$1 139
EXPENSES AND NET DECREASES				
Farm improvements		82	90	71
Horses		---	---	---
Miscellaneous livestock decreases		---	---	---
Machinery and equipment		131	119	148
Feed and grains		---	---	---
Livestock expense		11	11	11
Crop expense		110	137	79
Hired labor		68	83	31
Taxes		95	109	70
Miscellaneous expenses		19	19	19
Total expenses & net decreases	$	$ 516	$ 568	$ 429
RECEIPTS LESS EXPENSES	$	$1 336	$1 864	$ 710
Total unpaid labor		546	510	605
Operator's labor		386	382	376
Family labor		160	128	229
Net income from investment and management		790	1 354	105
RATE EARNED ON INVESTMENT	%	8.08%	13.98%	1.31%
Return to capital and operator's labor and management		1 176	1 736	481
5% of capital invested		489	484	400
LABOR AND MANAGEMENT WAGE	$	$ 687	$1 252	$ 81

In the group of 56 farms on the lower-valued land, the most successful one-third shows an average net income of $1,354, while the average net income of the least successful one-third was only $105. The average net income on the 17 farms on the higher-valued land was $2,476, and the average net income on the 10 dairy farms was $1,277.

The following table, based upon all 83 accounting farms, shows the number of farms having certain net incomes per acre. There was a marked difference between the most successful and the least successful farms.

Average net income per acre	Number of farms	Average net income per acre	Number of farms
$19	2	$7	11
17	1	5	17
15	3	3	18
13	4	1	8
11	4	-1	7
9	7	-3	1

A further study of the farm businesses made by comparing the investments, receipts, and expenses of the group of farms with the highest net incomes, with those having the lowest, should throw some light on the question of why some farmers are more successful than others. This comparison is shown in the table on pages 3 and 5.

In the group of 56 farms on the lower-valued land, the most profitable farms averaged 186 acres each, the least profitable 146 acres. This difference in size accounts in part for the variation in the average investment, receipts, and expenses in the two groups. The most profitable farms had higher total receipts and net increases due to larger sales of feed and grains, and of livestock and livestock products. Although the expenses per farm were higher on the most profitable farms, the total expense per acre, including the charge for family labor, was less than it was on the least profitable farms.

The 17 farms on the higher-valued land were approximately the same size as the 10 dairy farms, but they had a much larger total farm investment, due chiefly to their higher land values. The 10 dairy farms had a larger investment in total livestock, but not as large an investment in feed and grains as the 17 farms on the higher-valued land. The 17 farms on the higher-valued land had higher total receipts and net increases, due to their larger sales of feed and grains. However, they had smaller receipts from livestock and livestock products than the 10 dairy farms. The total expenses per farm and per acre, including the charge for family labor, were less on the 10 dairy farms than on the 17 farms on the higher-valued land.

Investments, Receipts, Expenses and Earnings on 27 Southern Illinois Farms in 1934

Items	Your farm	17 farms on higher-valued land	10 dairy farms
CAPITAL INVESTMENTS			
Land		13 024	7 834
Farm improvements		2 491	2 377
Livestock total	_____	1 103	1 319
Horses		396	290
Cattle		336	796
Hogs		254	134
Sheep		34	1
Poultry		83	98
Machinery and equipment		685	996
Feed and grains		1 323	982
Total capital investment	$_____	$18 826	$13 508
RECEIPTS AND NET INCREASES			
Livestock total	_____	1 378	1 776
Horses		26	70
Cattle		154	195
Hogs (including AAA payments)		740	463
Sheep		52	2
Poultry		103	113
Egg sales		140	145
Dairy sales		163	788
Feed and grains (including AAA payments)		2 636	735
Labor off farm		62	109
Miscellaneous receipts		1	9
Total receipts & net increases	$_____	$ 4 079	$2 629
EXPENSES AND NET DECREASES			
Farm improvements		144	111
Horses		---	---
Miscellaneous livestock decreases		---	---
Machinery and equipment		207	205
Feed and grains		---	---
Livestock expense		21	28
Crop expense		184	124
Hired labor		278	137
Taxes		184	117
Miscellaneous expenses		21	22
Total expenses & net decreases	$_____	$ 1 039	$ 744
RECEIPTS LESS EXPENSES	$_____	$ 3 040	$1 885
Total unpaid labor		564	608
Operator's labor		404	420
Family labor		160	188
Net income from investment and management		2 476	1 277
RATE EARNED ON INVESTMENT	_____%	13.15%	9.45%
Return to capital and operator's labor and management		2 880	1 697
5% of capital invested		941	676
LABOR AND MANAGEMENT WAGE	$_____	$ 1 939	$ 983

Changes in Inventories and Inventory Values

The year 1934 was similar to 1933 in that the prices of farm products continued to advance, causing further increases in inventory values. Owing to the poor crop yields in 1934 there were fewer bushels of grain on hand to inventory at the end of the year than at the beginning. The value of the smaller amount of grain, however, was greater than for the larger amount on hand at the beginning of the year.

Bushels of Grain Inventoried on 56 Farms on Lower-Valued Land

	Corn		Wheat	
	Jan. 1, '34	Dec. 31, '34	Jan. 1, '34	Dec. 31, '34
Average of 56 farms	710	232	23	27
Average of 19 high farms. .	754	775	200	219
Average of 19 low farms . .	433	273	64	57
Your farm				

Bushels of Grain Inventoried on Farms on Higher-Valued Land and on Dairy Farms

	Corn		Wheat	
	Jan. 1, '34	Dec. 31, '34	Jan. 1, '34	Dec. 31, '34
Average of 17 farms on higher-valued land	1 826	1 284	159	543
Average of 10 dairy farms .	847	615	183	171
Your farm				

The difference in quantities of grain inventoried was one of the factors influencing the difference in earnings. The most profitable farms in the lower-valued land group had larger inventories of corn and wheat, both at the beginning and end of the year, than the least profitable farms in that group. The large quantity of grain inventoried on the 17 farms on higher-valued land significantly influenced their returns from feed and grains.

The average inventory increase for the 83 accounting farms in this study was $680 in 1934. There were increases of $574 in feed and grain, $78 in livestock, and $30 in machinery, while improvements showed a decrease of $2. Such an increase in inventory as that for machinery results from the value of new replacements during the year being in excess of the depreciation costs. This increase is of considerable interest, for it is the first time that such an increase in machinery has occurred since farm earnings began to decline so drastically with the general depression.

Inventory Changes on 83 Accounting Farms
in Southern Illinois for 1934

Items	Beginning inventory 1-1-34	Closing inventory 12-31-34	Inventory changes 1934	Inventory changes, your farm
Total livestock	$ 993	$1 071	$ 78	$
Feed and grains	890	1 464	574	
Machinery	727	757	30	
Improvements (except residence)	1 834	1 832	- 2	
Total	$4 444	$5 124	$680	$

Some Adjustments on Accounting Farms in Southern Illinois Since 1929

Farmers have been forced to make adjustments in their cash expenditures as the result of changes in their cash income. From 1930 through 1933, farm operating costs declined each year, but the year 1934 brought a reversal of this trend. The total operating expenses were 10 cents an acre higher in 1934 than in 1933, while cash operating expenses were $1,007 a farm in 1934 as compared with $732 in 1933. While there were increases over the previous year for all items of expenditures except feed and grain and livestock expense, the most significant increases were for crop expense, machinery, labor, and improvements. Indications point to an expansion of spending in 1935 for repairs and replacements for machinery and improvements, since farmers have postponed purchase of these items during the five-year period since 1929.

Cash Income and Expenses on 83 Accounting
Farms in Southern Illinois Counties for 1929 and 1934

Items	Your farm 1934	Average cash expense per farm 1934	Average cash expense per farm 1929	Your farm 1934	Average cash income per farm 1934	Average cash income per farm 1929
Livestock	$	$ 126	$ 236	$	$1 148	$1 976
Feed and grains		139	432		797	596
Machinery		239	332		54	83
Improvements		104	158		8	4
Labor		120	161		67	73
Miscellaneous		20	21		4	8
Livestock expense		15	15		---	---
Crop expense		128	130		---	---
Taxes		116	168		---	---
Total	$	$1 007	$1 653	$	$2 078	$2 740
Excess of cash sales over expenses				$	$1 071	$1 087
Increase in inventory					680	546
Income to labor and capital (Receipts less expenses)					1 751	1 633

The cumulative effect of several years of low agricultural prices on the demand for manufactured goods can readily be ascertained by a comparison of cash farm expenditures in 1934 with those in 1929. Although the average cash income in 1934 was 76 percent of that in 1929, cash expenditures were only 61 percent as large. In 1934 livestock purchases were 53 percent, and feed and grain purchases 32 percent as large as in 1929. In 1934 these farms paid out 72 percent as much for machinery, 66 percent as much for improvements, and 98 percent as much for crop expense as in 1929, while taxes were reduced to 69 percent of the 1929 level.

Comparison of Farms with High and Low Earnings on Lower-Valued Land

The 19 most profitable farms on the lower-valued land had net receipts per acre of $7.27, as compared with 72 cents per acre for the 19 least profitable farms on the lower-valued land. The reasons for this difference may be obtained from a study of the data on pages 3 and 12.

The most profitable farms were 39.8 acres larger and had a larger proportion of their land area tillable than the least profitable farms. They had 10.2 acres more corn, 3.7 acres more oats, 16.6 acres more wheat, and 3.8 acres more soybeans than the least profitable farms. Since wheat and soybeans were two of the high-profit crops in 1934, their larger acreage of these crops was an important factor in accounting for the higher returns from feed and grains on the most profitable farms. The most profitable farms also carried larger inventories of feed and grains on which to make a profit when prices advanced. Along with the larger acreage of crops, another reason for the larger inventories of feed and grains was the higher crop yields, there being an advantage of 13.8 bushels of corn, 2.0 bushels of oats, 5.5 bushels of wheat, and 5.0 bushels of soybeans per acre in favor of the high-profit group.

The most profitable farms had more livestock, and were more efficient in their livestock feeding operations than the least profitable farms. They had an investment in productive livestock of $3.66 per acre, and fed $826 of feed per farm, as compared with $3.35 invested per acre, and $578 of feed fed per farm on the least profitable farms. The productive livestock on the most profitable farms returned $128 per $100 of feed fed, as compared with returns of $101 per $100 of feed fed on the least profitable farms. The most profitable farms had an income of $104 per litter farrowed, as compared with $65 for the least profitable group.

The larger income on the most profitable farms was secured with a total operating cost of $5.79 per acre, as compared with $7.06 for the least profitable farms. The man labor cost per crop acre was $4.71 on the most profitable farms, as compared with $6.71 per crop acre on the least profitable farms, while power and machinery costs per crop acre were $1.90 on the most profitable farms and $3.08 per crop acre on the least profitable farms.

Analysis of Farms on Higher-Valued Land and Dairy Farms

The 17 farms on the higher-valued land had net receipts per acre of $10.57, while the 10 dairy farms had net receipts per acre of $5.47. The reasons for these returns may be obtained from a study of the data on pages 5 and 14. The returns from these two groups of farms may be further analyzed by comparing the data on them with the data on the 56 farms on the lower-valued land, on pages 3 and 12.

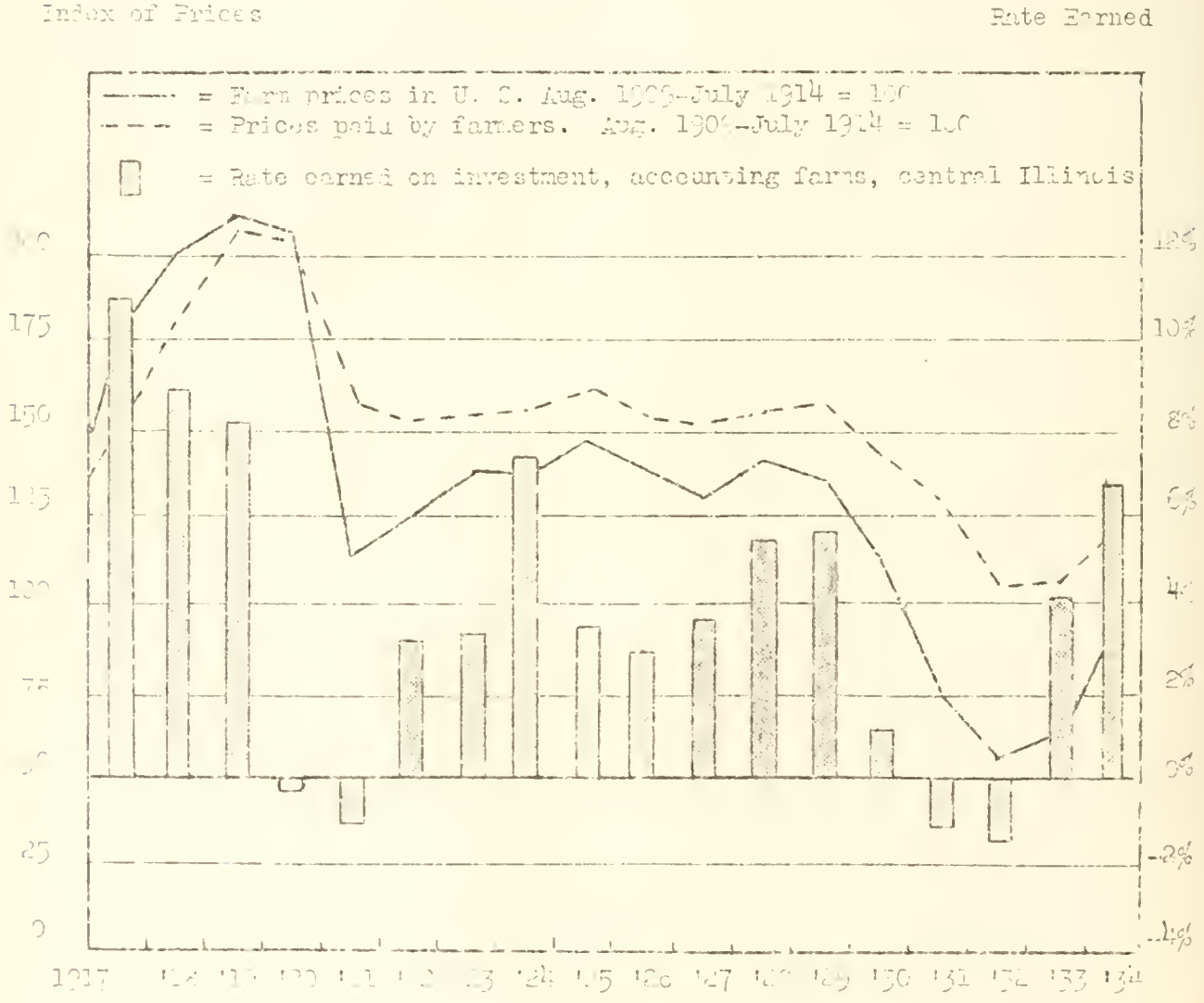
The 17 farms averaged 234 acres in size, and had 159.5 crop acres per farm. They had 55.4 acres of corn, 13.6 acres of oats, 47.0 acres of wheat, and 27.3 acres of hay. They carried large inventories of feed and grains on which to make a profit when prices advanced. Their crop yields were very excellent, as they had an average production per acre of 36.2 bushels of corn, 33.0 bushels of oats, and 26.0 bushels of wheat. These 17 farms had an average investment in productive livestock of $3.13 per acre, and fed $1,189 of feed per farm. They secured returns of $114 per $100 of feed fed to productive livestock.

The 10 dairy farms had an average investment in productive livestock of $4.48 per acre, and fed $1,185 of feed per farm. They secured returns of $144 per $100 of feed fed. These farms had an average of 14.2 dairy cows per farm, and had average dairy sales of $55 per dairy cow. The 10 dairy farms averaged 233 acres in size, and had 29.5 acres of corn, 19.4 acres of oats, 26.6 acres of wheat, 48.2 acres of hay, and 63.1 acres of tillable pasture per farm. They had average crop yields of 26.5 bushels of corn, 14.9 bushels of oats, and 18.9 bushels of wheat per acre.

The 17 farms on the higher valued land had total expenses per acre, including the charge for family labor, of $6.85, as compared with $5.80 per acre on the 10 dairy farms. The man labor cost per crop acre was $3.30 on the group of 17 farms, and $4.96 per crop acre on the 10 dairy farms. Power and machinery cost per crop acre averaged $2.76 for the 17 farms on the higher-valued land, and $2.30 per crop acre on the 10 dairy farms.

Influence of Price Changes on Farm Earnings

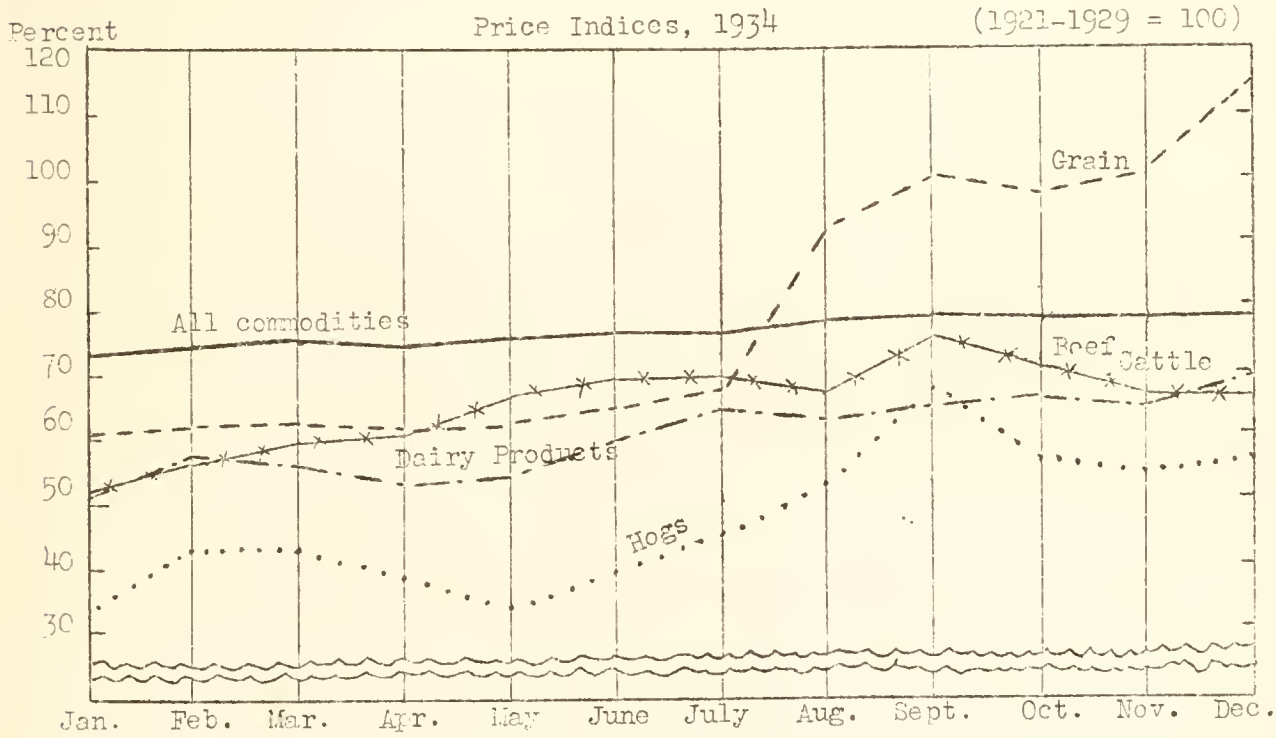
Farm prices in 1934 advanced more rapidly than did the prices of commodities which farmers bought. Farmers of the United States as a group could exchange their farm products in 1934 for 74 percent as many goods as for the period 1909-1914, while in 1933 they received only 64 percent, and 1932 only 61 percent as much in exchange for what they had to sell as in the prewar period. In the month of February, 1935, this index of purchasing power had increased to 87 percent of prewar, the index of farm prices having risen to 111 as compared with an index of 127 for commodities which farmers buy. When the line representing farm prices drops below the line representing prices paid by farmers, farm earnings are very low, but when these lines come close together farm earnings increase. (See following graph.)



Since the price of some farm products advanced much more rapidly during 1934 than other products, it is evident that some farms would benefit more than others, depending upon the kind and quantity of products sold. Grain prices advanced much more rapidly than livestock prices; which resulted in a very bad price ratio for farmers who buy large quantities of feed. The average Illinois farm price of corn was 41 cents a bushel in January, 1934; it advanced steadily until the end of the year when it was 88 cents a bushel. Other grains made marked advance although not so great an advance as corn. The price of hogs fluctuated from a low of $3.20 a hundred in May to a high of $6.30 in September. The low point in the fall came in November when the average price was $5.10. The price has advanced quite rapidly since November, the average price being $7.50 for February, 1935. Beef cattle were worth $4.10 a hundred in January, 1934 and advanced each month until September, when the price was $5.90. They dropped to $5.20 in December but increased again to $7.40 for February, 1935.

The year 1934 set a record for the reduction in the numbers of livestock. The percentage decreases by species were as follows: horses, 1.1 percent; mules, 2.6 percent; all cattle, 11.2 percent; sheep, 4.7 percent; hogs, 35.3 percent. When all species are combined on the basis of their capacity to consume feed, the reduction was 13 percent. This reduction will greatly reduce the demand for feeds produced in 1935.

The relative change in prices of important commodities may be noted in the following graph, which shows the average Illinois farm prices by months as a percentage of the average prices for the period 1921-1929.



All commodities index represents the wholesale price of a large number of commodities for the United States, as computed by Bureau of Labor Statistics.

Grain and livestock indices represent average monthly farm prices in Illinois.

Factors Helping to Analyze the Farm Business on 56
Southern Illinois Farms on Lower-Valued Land in 1934

Itesm	Your farm	Average of 56 farms	19 most profitable farms	19 least profitable farms
Size of farms--acres		184.0	186.2	146.4
Percent of land area tillable		85.3	88.2	84.4
Percent of tillable land in hay and pasture		52.7	45.3	60
Gross receipts per acre		10.07	13.06	7.78
Total expenses per acre		5.78	5.79	7.06
Net receipts per acre		4.29	7.27	.72
Value of land per acre		32	31	33
Total investment per acre		53	52	55
Acres in Corn		27.6	30.6	20.4
Oats		12.3	12.5	8.8
Wheat		20.2	28.1	11.5
Soybeans		4.4	5.3	1.5
Hay		32.9	27.9	36.8
Tillable pasture		49.2	46.5	37.4
Crop yields--Corn, bu. per acre		29.1	34.6	20.8
Oats, bu. per acre		17.8	18.6	16.6
Wheat, bu. per acre		19.6	21.1	15.6
Soybeans, bu. per acre		11.9	15.8	10.8
Value of feed fed to productive L.S.		742	826	578
Returns per $100 of feed fed to productive livestock		116	128	101
Returns per $100 invested in:				
Cattle		70	77	64
Poultry		248	264	219
Pigs weaned per litter		6.5	6.7	6.2
Income per litter farrowed		89	104	65
Dairy sales per dairy cow		25	21	54
Investment in productive L.S. per A.		3.36	3.66	3.35
Receipts from productive L.S. per A.		4.68	5.66	4.00
Man labor cost per crop acre		5.19	4.71	6.71
Machinery cost per crop acre		1.23	1.01	1.72
Power and mach. cost per crop A.		2.27	1.90	3.08
Farms with tractor		43%	58%	42%
Value of feed fed to horses		143	143	145
Man labor cost per $100 gross income		30	23	51
Expenses per $100 gross income		57	44	91
Farm improvements cost per acre		.45	.48	.98
Excess of sales over cash expenses		831	1 022	481
Increase in inventory		505	842	229
Rate earned on investment		8.08	13.98	1.31
Gross receipts per farm		1 852	2 432	1 139

Chart for Studying the Efficiency of Various Parts of Your Business, Southern Illinois Counties 1934

The numbers above the lines across the middle of the page are the averages for the 56 farms on lower-valued land included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre			Hogs: Income per litter	Dairy sales per dairy cow	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Oats	Wheat					Labor	Power and machinery				Per acre	Per farm	
18.0	49	33	30	139	50	448	166	.19	--	5	1500	1831	20	3350	380
16.0	45	30	28	129	45	408	156	1.19	.25	10	1300	1631	18	3050	340
14.0	41	27	26	119	40	368	146	2.19	.75	15	1100	1431	16	2750	300
12.0	37	24	24	109	35	328	136	3.19	1.25	20	900	1231	14	2450	260
10.0	33	21	22	99	30	288	126	4.19	1.75	25	700	1031	12	2150	220
8.08	29.1	17.8	19.6	89	25	248	116	5.19	2.27	30	505	831	10.07	1852	184
6.0	25	15	18	79	20	208	106	6.19	2.75	35	300	631	8	1550	140
4.0	21	12	16	69	15	168	96	7.19	3.25	40	100	431	6	1250	100
2.0	17	9	14	59	10	128	86	8.19	3.75	45	-100	231	4	950	60
0.	13	6	12	49	5	88	76	9.19	4.25	50	-300	31	2	650	20
-2.0	9	3	10	39	0	48	66	10.19	4.75	55	-500	-169	0	350	--

Factors Helping to Analyze the Farm Business on 27 Southern Illinois Farms in 1934

Items	Your farm	17 farms on higher-valued land	10 dairy farms
Size of farms--acres	_____	234.2	233.3
Percent of land area tillable	_____	85.7	87.2
Percent of tillable land in hay and pasture	_____	34.0	54.7
Gross receipts per acre	_____	17.42	112.7
Total expenses per acre	_____	6.85	5.80
Net receipts per acre	_____	10.57	5.47
Value of land per acre	_____	56	34
Total investment per acre	_____	80	58
Acres in Corn	_____	55.4	29.5
Oats	_____	18.6	19.4
Wheat	_____	47.0	26.6
Soybeans	_____	1.5	4.9
Hay	_____	27.3	48.2
Tillable pasture	_____	41.2	63.1
Crop yields--Corn, bu. per acre	_____	36.2	26.5
Oats, bu. per acre	_____	33.0	14.9
Wheat, bu. per acre	_____	26.0	18.9
Value of feed fed to productive L.S.	_____	1 189	1 185
Returns per $100 of feed fed to productive livestock	_____	114	144
Returns per $100 invested in:			
Cattle	_____	91	121
Poultry	_____	276	250
Pigs weaned per litter	_____	6.1	6.9
Income per litter farrowed	_____	76	93
Number of dairy cows	_____	5.1	14.2
Dairy sales per dairy cow	_____	32	55
Investment in productive L.S. per A.	_____	3.13	4.48
Receipts from productive L.S. per A.	_____	5.78	7.31
Man labor cost per crop acre	_____	3.30	4.96
Machinery cost per crop acre	_____	1.30	1.46
Power and mach. cost per crop A.	_____	2.76	2.30
Farms with tractor	_____	71%	60%
Value of feed fed to horses	_____	260	187
Man labor cost per $100 gross income	_____	13	26
Expenses per $100 gross income	_____	39	51
Farm improvements cost per acre	_____	.61	.48
Excess of sales over cash expenses	_____	1 650	1 430
Increase in inventory	_____	1 390	455
Rate earned on investment	_____	13.15%	9.45%
Gross receipts per farm	_____	4 079	2 629

Chart for Studying the Efficiency of Various Parts of Your Business,
Southern Illinois Counties 1934

The numbers above the lines across the middle of the page are the averages for the 17 farms on higher-valued land and the 10 dairy farms included in this report for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your locality.

Rate earned on investment	Bushels per acre		Hogs: Income per litter	Number of dairy cows	Dairy sales per dairy cows	Poultry income per $100 invested	L.S. income per $100 of feed fed	Cost per crop acre		Labor cost per $100 gross receipts	Increase in inventory	Sales over cash expenses	Gross receipts		Acres in farm
	Corn	Wheat						Labor	Power and machinery				Per acre	Per farm	
21.6	51	35.0	160	20	94	460	205	--	--	--	3400	3040	24.35	6400	440
19.6	47	32.5	145	18	84	420	190	.13	.50	0	2900	2740	22.35	5800	400
17.6	43	30.0	130	16	74	380	175	1.13	1.00	5	2400	2440	20.35	5200	360
15.6	39	27.5	115	14	64	340	160	2.13	1.50	10	1900	2140	18.35	4600	320
13.6	35	25.0	100	12	54	300	145	3.13	2.00	15	1400	1840	16.35	4000	280
11.6	31.4	22.5	85	10	44	263	129	4.13	2.53	20	922	1540	14.35	3354	233.8
9.6	27	20.0	70	8	34	220	115	5.13	3.00	25	400	1240	12.35	2800	200
7.6	23	17.5	55	6	24	180	100	6.13	3.50	30	-100	940	10.35	2200	160
5.6	19	15.0	40	4	14	140	85	7.13	4.00	35	-600	640	8.35	1600	120
3.6	15	12.5	25	2	4	100	70	8.13	4.50	40	--	340	6.35	1000	80
1.6	11	10.0	10	0	--	60	55	9.13	5.00	45	--	40	4.35	400	--

Influence of AAA Programs on Cropping Systems and Farm Incomes

The farm-account records in Illinois were influenced both directly and indirectly by the corn-hog and wheat adjustment programs. A large percentage of accounting farms were under one or both contracts in 1934. The acreages of corn and wheat on these farms were therefore less than normal. This should have resulted in lower operating costs. Corn-hog benefit payments for the entire 1934 program will total about 40 million dollars for the state, while wheat benefit payments will be about 2.4 million dollars.

The benefit payments for accounting farms are indicated in the following table, which shows the average payment for those farms receiving payments, and includes only those payments received by the cooperator before the 1934 books were closed. In some cases only the first corn-hog check is included, while in other cases the second check had been received. The second payments not received, and the third payments will be entered in the 1935 book.

AAA Benefit Payments Received in 1934

	Corn		Wheat		Hogs		Average of all payments 1/
	Number of farms	Amount per farm	Number of farms	Amount per farm	Number of farms	Amount per farm	
1/3 most profitable lower-valued land farms	15	$53	7	$100	13	$ 89	$148
1/3 least profitable lower-valued land farms	10	47	6	35	12	49	66
17 higher-valued land farms	15	91	14	136	14	122	293
10 dairy farms	9	36	6	81	8	83	147
All accounting farms . . .	63	60	42	91	64	85	157

1/ Total benefit payments reported by accounting farms under contract for 1934 divided by total number of accounting farms.

On many farms the cash received from benefit payments will more than pay for the year's taxes. As an average for all accounting farms, the payments actually received were $41 more than sufficient to pay the 1934 taxes.

It is interesting to note the use made of the contracted acres on the accounting farms. The average farm had 15.9 contracted acres which were used as follows: 3.3 idle; 3.2 mixed red clover and timothy; 4.2 sweet clover; 1.4 soybeans; 0.6 alfalfa; and 3.2 acres were in other crops. These data indicate that most farmers made good use of their contracted acres from the standpoint of soil improvement, as a large part of them were in legumes. When the Government restrictions on the use of crops grown on contracted acres were removed, they were on many farms the most profitable crops as they furnished hay and pasture where badly needed in drouth areas. The legumes had the further advantage of being immune to attack from chinch bugs.

Farm earnings were influenced indirectly by the AAA programs in that the reduction in production increased the price of the commodities involved. The drouth was a more important factor in reducing production than the adjustment programs, yet if it had not been for the corn-sealing program there would have been but little corn in the hands of farmers at the time the major price advance became effective.

Variations in Earnings over Five-Year Period

A comparison of production, income, and expenditures on the accounting farms in Southern Illinois for the last five years is very interesting because of the violent changes in price level. Crop yields were good in most of Southern Illinois in 1934 and total receipts per farm were higher than in any other year in the last five. Operating costs per acre were lower than in any year of the last five except 1933. Thus profits were the best that this area has experienced since 1929.

Earnings in 1935, as usual, will depend upon individual efficiency, weather, and prices. With normal weather conditions, prices of grain are likely to go down to a more normal level which will give individual efficiency the responsibility for higher earnings on each farm.

Comparison of Earnings and Investments on Accounting Farms in Southern Illinois for 1930-1934

Items	1930[1/]	1931[2/]	1932[3/]	1933[4/]	1934
Number of farms	34	62	39	30	83
Average size of farms, acres	181	207	178	193	200
Average rate earned, to pay for management, risk and capital	-3.0%	-1.5%	-5.1%	2.5%	9.9%
Average labor and management wage	$-382	$-309	$-567	$133	$983
Gross income per acre	6.84	6.16	3.44	7.24	12.00
Operating cost per acre	8.83	7.03	6.13	5.94	6.04
Average value of land per acre	37	32	31	32	38
Total investment per acre	67	58	53	52	60
Investment per farm in:					
Total livestock	1 604	1 545	1 085	1 039	993
Cattle	771	809	505	476	394
Hogs	163	146	96	103	142
Poultry	201	165	126	111	95
Gross income per farm	1 237	1 274	610	1 400	2 403
Income per farm from:					
Crops	---	239	---	338	1 232
Miscellaneous income	57	90	49	69	4
Total livestock	1 180	945	561	993	1 100
Cattle	101	145	10	40	137
Dairy sales	348	314	265	506	217
Hogs	316	206	115	198	418
Poultry	398	264	167	189	87
Average yield of corn in bu.	12	31	32	29	31
Average yield of wheat in bu.	16	29	15	14	12

1/ Records from Edwards, Richland, and Wayne Counties included for 1930.
2/ Records from Richland, Pope, Wayne, Johnson, Williamson, and Franklin Counties included for 1931.
3/ Records from Richland, Wayne, Johnson, and Williamson Counties included for 1932.
4/ Records from Jefferson, Marion, Jackson, and Clay Counties included for 1933.